FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

BIWEEKLY 2000-16

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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability

Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; + - See AD for additional information.

Biweekly 2000-01

99-27-01		Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219
99-27-03		Fokker	F27 Mark 050 Series
99-27-04		Rolls-Royce	Engine: Dart 506, 510, 511, 514, 525, 526, 529, 530, +
99-27-05		Boeing	767-200, -300, and -300F Series
99-27-06		Boeing	757-200, -200PF, and -200CB Series
99-27-07	S 98-25-53	Airbus	A300 B4-600R and A300 F4-600R Series
99-27-08		SAAB	SAAB SF340A and SAAB 340B Series
99-27-09		Airbus	A300 B4-203 Series
99-27-10		Airbus	A310 and A300-600 Series
99-27-11		British Aerospace	BAC 1-11 200 and 400 Series
99-27-13		Fokker	F27 Mark 050 Series
99-27-14	S 99-01-15	Airbus	A340-211, -212-, -213, -311, -312, and -313 Series
99-27-15		General Electric	Engine: GE90-76B, -77B, -85B, -90B, and -92B
99-27-16		CFE	Engine: CFE738-1-1B
2000-01-51	E	Bombardier	CL-600-2B16 (CL-604)

Biweekly 2000-02

98-19-15 R1	R 98-19-15	Fairchild	SA226-T, SA226-T(B), SA226-AT, SA226-TC +
99-26-21		Boeing	737-300, -400, -500, -600, -700, and -800 Series
2000-01-01		Airbus	A300 B2-1A, B2-1C, B2-203, B2K-3C, B4-103, B4-2C +
2000-01-02		Raytheon	BAe.125 Series 1000A and 1000B and Hawker 1000 Series
2000-01-03		SAAB	SAAB 2000 Series
2000-01-04		SAAB	SAAB 2000 Series
2000-01-07		Bombardier	DHC-8-100, -200, and -300 Series
2000-01-08		British Aerospace	ATP
2000-01-09		General Electric	Engine: CJ610 Series and CF700 Series
2000-01-12	S 97-14-11	Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-01-13	S 99-08-12	Pratt & Whitney	Engine: JT9D-7, -7A, -7H, -7AH, -7F, -7J, -20, -20J +
2000-01-14		Boeing	777 Series
2000-01-15		Fokker	F27 Mark 050 Series
2000-01-17		McDonnell Douglas	MD-90 Series
2000-01-18		McDonnell Douglas	DC-8 Series
2000-01-51		Bombardier	CL-604 variant of Canadair Model CL-600-2B16 Series
2000-02-01		McDonnell Douglas	DC-8 Series
2000-02-02		Short Brothers	SD3-60 SHERPA, SD3-SHERPA Series and SD3-30 Series
2000-02-03		Boeing	737-300, -400, and -500 Series
2000-02-04		Airbus	A300 Series, A300-600, and A310 Series
2000-02-13		Bombardier	DHC-8-100, -200, and -300 Series

Biweekly 2000-03

99-26-03	COR	McDonnell Douglas	MD-11 Series
2000-02-05	S 98-24-01	British Aerospace	Jetstream 4101
2000-02-06		Bombardier	DHC-8-100, -200, and -300 Series
2000-02-07		Bombardier	DHC-7-100 Series
2000-02-08		Dornier	328-100 Series
2000-02-10		Boeing	747 Series
2000-02-11		Boeing	777-200 Series
2000-02-15		Raytheon	65-90, 65-A90, B90, and C90
2000-02-17		Rolls-Royce	Engine: RB211 Trent 768-60, 772-60, and 772B-60 Series
2000-02-18	S 97-09-14	Boeing	737-100, -200, -300, -400, and -500 Series
2000-02-19	S 90-02-16	Boeing	727 Series
2000-02-20	S 95-13-12 R1	Boeing	767 Series
2000-02-21		British Aerospace	Jetstream 4101

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Biweekly 2000-03...Cont'd

2000-02-22		Boeing	747-400 Series
2000-02-23		McDonnell Douglas	DC-9-10, -20, -30, -40, and -50 Series and DC-9-81, +
2000-02-24		Airbus	A300, A310, and A300-600 Series
2000-02-33		Boeing	747-400 Series
2000-02-34		Bombardier	CL-600-2B19 (Regional Jet Series 100) Series
2000-02-35		Raytheon	DH.125, HS.125, BH.125 Series 1A, 1B, 3A, 400A, +
2000-02-36	S 98-20-10	Airbus	A319, A320, and A321 Series
2000-02-37		Boeing	747 Series
2000-02-38	S 91-20-07	Airbus	A300, A300-600, and A310 Series
2000-03-01		Boeing	747-100 and -200 Series
2000-03-02		General Electric	Engine: GE90-90B, -85B, and -76B Series
2000-03-03		General Electric	Engine: CF34-3A1 and -3B1 Series

Biweekly 2000-04

99-23-26 R1		General Electric	Engine: CF34-1A, CF34-3A, -3A1, -3A2, and CF34-3B +
2000-02-27		Embraer - Empresa Brasileira	EMB-110P1 and EMB-110P2
2000-02-39		Airbus	A300 Series
2000-03-04		General Electric	Engine: CF6-80C2 Series turbofan
2000-03-05		Boeing	737-200 Series
2000-03-07		Rolls-Royce	Engine: RB211-524H-36 Series turbofan
2000-03-08		McDonnell Douglas	MD-90-30
2000-03-10		McDonnell Douglas	MD-11 Series
2000-03-11		McDonnell Douglas	MD-11 Series
2000-03-12		McDonnell Douglas	MD-11 Series
2000-03-13		McDonnell Douglas	MD-11 Series
2000-03-14		McDonnell Douglas	MD-11 Series
2000-03-15		McDonnell Douglas	MD-11 and MD-11F Series
2000-03-16		McDonnell Douglas	MD-11 Series
2000-03-17	S 97-23-01	Fairchild	SA226 and SA227 Series
2000-03-20		Airbus	A300-600
2000-03-21		Boeing	767
2000-03-22		Boeing	747-100, -200, and 747SP Series
2000-04-02		Boeing	737-100, -200, -300, -400, and -500 Series
2000-04-03		McDonnell Douglas	DC-3 and DC-4 Series
2000-04-04		Fokker	F.28 Mark 0070 and 0100 Series
2000-04-05		Israel	Astra SPX Series
2000-04-06		Airbus	A319, A320, and A321 Series
2000-04-07		British Aerospace	ATP
2000-04-08		Boeing	737-200C Series
2000-04-09		Embraer - Empresa Brasileira	EMB-135 and EMB-145 Series
2000-04-10		Hoffmann	Propeller: HO27( ) and HO4/27 Series
2000-04-11		Airbus	A319, A320, and A321 Series

Biweekly 2000-05

98-21-21	R1	Bob Fields Aerocessories	Appliance: Electric inflatable door seals
2000-03-51		McDonnell Douglas	DC-9, MD-90-30, 717-200, and MD-88
2000-04-12		Cameron	Appliance: Titanium Propane Cylinders
2000-04-13		Aerospatiale	ATR72 Series
2000-04-14		General Electric	Engine: CF6-80C2 A1/A2/A3/A5/A8/A5F/B1/B2/B4/B6 +
2000-04-17		Boeing	747-100, -200, and -300 Series
2000-04-18		Boeing	757 Series
2000-04-19		Dassault	Mystere-Falcon 50 Series
2000-04-22		Rolls-Royce	Engine: RB211-524G2-T-19, RB211-524G3-T-19, +
2000-04-23		Dornier	328-100 Series and 328-300 Series

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Biweekly 2000-05...Cont'd

2000-05-09		Boeing	757-200, -200PF, and –200CB Series
2000-05-10		General Electric	Engine: GE90-85B Series turbofan

Biweekly 2000-06

2000-03-03	COR	General Electric	Engine: CF34-3A1 and -3B1 Series turbofan
2000-04-24		Honeywell International	Appliance: 36-300(A), 36-280(B), and 36-280(D) Series
2000-05-01		McDonnell Douglas	MD-11 Series
2000-05-02		Fokker	F27 Mark 050, 200, 500, and 600 Series
2000-05-04		Airbus	A330 and A340 Series
2000-05-05		Construcciones Aeronauticas	CN-235-100 and CN-235-200 Series
2000-05-07		Airbus	A300 and A300-600 Series
2000-05-08		Airbus	A319 and A321 Series
2000-05-14	S 80-22-53	AlliedSignal	Engine: ALF502 and LF507 Series turbofan
2000-05-18		Airbus	A300, A310, and A300-600 Series
2000-05-19		Boeing	727 Series
2000-05-20		Dassault	Fan Jet Falcon, Mystere-Falcon 20, 50, 00, and 900 Series +
2000-05-21		Airbus	A319, A320, A321, A330, and A340 Series
2000-05-24		Honeywell International	Appliance: KAP 140 or KFC 225 autopilot system
2000-05-25	S 96-14-09	British Aerospace	BAe 146-100A, and -300 Series
2000-05-26	S 93-18-04	Aerospatiale	ATR42-200, ATR42-300, and ATR42-320 Series
2000-05-27	S 98-21-06	British Aerospace	BAe 146-100A, -200A, and -300A Series
2000-05-28		British Aerospace	BAe 146 and Avro 146-RJ Series
2000-05-29		Boeing	737-100, -200, -300, -400, and -500 Series
2000-05-30		Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300 +
2000-06-02		Dornier	228-100, 228-101, 228-200, 228-201, 228-202, +
2000-06-04		Fairchild	SA226-T, SA226-AT, SA226-T(B), SA227-AT, +

Biweekly 2000-07

2000-05-22		CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, and -3C Series
2000-06-08	S 98-01-15	Airbus	A330-301, -321, -322, -341, -342, A340-211, -212, -213 +
2000-06-13	S 98-25-06	Boeing	737-200, -200C, -300, -400 Series
2000-07-01	S 98-13-34	Embraer-Empresa Brasileira	EMB-145 Series
2000-07-02		McDonnell Douglas	MD-11 Series
2000-07-51	E	McDonnell Douglas	717-200 Series

Biweekly 2000-08

2000-01-05	S 99-18-03	Boeing	747-100B, -200, -300, and SP Series
2000-05-03		Airbus	A300-600 and A310 Series
2000-05-12		Rolls-Royce	Engine: RB211-524G2-19, RB211-524G3-19, +
2000-05-13		Boeing	737-100, -200, -300, -400, and -500 Series
99-13-08 R1		Lockheed	L-1011-385 Series
99-23-22 R2	Recission	Transport Category Airplanes	Appliance: Mode “C” Transponder
2000-07-05	S 99-07-06	Boeing	767 Series
2000-07-06		Boeing	737-100, -200, -200C, -300, -400, and -500 Series
2000-07-07		Airbus	A300 Series
2000-07-08		Boeing	777 Series
2000-07-10		Boeing	747-200B, -300, -400, -400D, -400F Series
2000-07-11		Industrie Aero. Mec.	Piaggio P-180
2000-07-13		Boeing	757-200, -200PF Series
2000-07-14		McDonnell Douglas	MD-11 Series
2000-07-15		McDonnell Douglas	MD-11 Series
2000-07-16	S 94-11-06	McDonnell Douglas	MD-11 and MD-11F Series

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Biweekly 2000-08...Cont'd

2000-07-18		McDonnell Douglas	MD-11 and MDj-11F Series
2000-07-20		McDonnell Douglas	MD-11 Series
2000-07-21		McDonnell Douglas	MD-11 Series
2000-07-22		Airbus	A300-600 Series
2000-07-23		Bombardier	DHC-8-100 Series
2000-07-24		Fokker	F.28 Mark 0070 and 0100
2000-07-25		Gulfstream Aerospace	G-IV Series
2000-07-27		Transport Category Airplanes	Appliance: Honeywell Air Data Inertial Reference Unit
2000-07-28	S 99-18-22	Fokker	F27 Series
2000-07-29	S 98-16-09	Airbus	A300, A310, and A300-600 Series
2000-08-01		Rolls-Royce	Engine: Tay 650-15 Series Turbofan
2000-08-03	S 2000-05-01	McDonnell Douglas	MD-11 Series

Biweekly 2000-09

95-19-04 R1	Rescission	Learjet	35, 35A, 36, 36A, 55, 55B, and 55C
99-27-14	COR S 99-01-15	Airbus industrie	A340-211, -212, -213, -311, -312, and –313 Series
2000-05-06		Raytheon Aircraft Company	400A series and 400T Series
2000-07-04		Dornier Luftfahrt GMBH	328-100 series
2000-07-09		Boeing	737-600, -700, and –800 series
2000-07-12		Boeing	727-100, -100C, and –200 Series
2000-07-17		McDonnell Douglas	MD-11 Series
2000-07-19		McDonnell Douglas	MD-11 Series
2000-07-26		Airbus Industrie	A300 Series
2000-07-51		McDonnell Douglas	717-200 Series
2000-08-07	S 96-24-16	Raytheon Aircraft Co	BAe 125-800A and BAe 125-800B, Hawker 800, +
2000-08-08		Boeing	737-600, -700, and –800 Series
2000-08-10	S 99-08-17	General Electric Company	Engine: GE90-76B/ -77B/ -85B/ -90B/ -92B Series
2000-08-11	S 99-08-18	General Electric Company	Engine: CF6-6, CF6-45, and CF6-50 Series
2000-08-12	S 99-08-13	General Electric Company	Engine: CF6-80A, CF6-80C2, and CF6-80E1 Series
2000-08-13		Learjet	45
2000-08-14		Boeing	747 Series
2000-08-15		Boeing	777 Series
2000-08-17		Boeing	737-100, -200, -300, -400, and –500 Series
2000-08-19		Boeing	727 and 727C series
2000-08-20		Lockheed	L-1011-385-1, -1-14, -1-15, and –3 Series
2000-08-21		Boeing	747 Series
2000-09-01	S 93-20-02	McDonnell Douglas	DC-8 Series
2000-09-02		McDonnell Douglas	DC-8 Series
2000-09-03	S 2000-02-33	Boeing	747-400 Series
2000-09-04	S 2000-02-20	Boeing	767 Series
2000-09-05		Allison Engine Company	Engine: AE 3007A, AE 3007A1, AE 3007A1/1, +

Biweekly 2000-10

2000-08-18		McDonnell Douglas	DC-9 series, MD-88, MD-90-30
2000-09-07		McDonnell Douglas	DC-10-10, -15, -30, -30F, and -40 Series, +
2000-09-08		Boeing	747-100, -200, 747SP, and 747SR Series
2000-09-09	S 99-01-12	Embraer - Empresa Brasileira	EMB-145
2000-09-10		Airbus Industrie	A300-600 Series
2000-09-11		Fokker Services BV	F.28 Mark 0070
2000-09-12		Raytheon Aircraft Company	400A series, 400T (T-1A) Series, 400T (TX) Series
2000-09-13		British Aerospace	Jetstream 3201
2000-09-14		Rolls-Royce	Engine: RB211-535 Series

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Biweekly 2000-10...Cont'd

2000-10-02		Airbus	All A319, A320, A321, A330, and A340 Series
2000-10-03		McDonnell Douglas	DC-10 Series
2000-10-51	E	Boeing	767 Series

Biweekly 2000-11

2000-04-05	C	Israel Aircraft Industries	Astra SPX Series
2000-10-01	S 96-08-08	Airbus Industrie	A300 B2, A300 B2K, A300 B2-200, A300 B4-2C, +
2000-10-04		Israel Aircraft Industries	1124 and 1124A Westwind
2000-10-11		Gulfstream Aerospace	G-159 Series
2000-10-12		Boeing	747-400 Series
2000-10-15	S 93-08-15	Airbus Industire	A320 Series
2000-10-16	S 98-14-11	Airbus Industrie	A319, A320, and A321 Series
2000-10-17		Boeing	747 Series
2000-10-18	S 96-11-05	Airbus Industrie	A300, A300-600, and A310 Series
2000-10-19		Israel Aircraft Industries	1125 Westwind Astra and Astra SPX Series
2000-10-21		Boeing	737-300, -400, and –500 Series
2000-10-23	S 97-26-21	Boeing	747-100, 747-200, 747-300, 747SR, and 747SP Series
2000-11-01		McDonnell Douglas	DC-9-81 (MD-81), DC-9-82 (MD-82), +
2000-11-02		McDonnell Douglas	DC-10-10F, DC-10-15, DC-10-30, DC-10-30F, +

Biweekly 2000-12

2000-10-20		Lockheed	L-1011-385 Series
2000-10-51		Boeing	767 Series
2000-11-03		Dassault Aviation	Falcon 2000, Mystere-Falcon 900, Falcon 900EX, +
2000-11-06		Boeing	767 Series
2000-11-07	S 97-05-01	Boeing	747-200, -300, and –400 Series
2000-11-08	S 98-08-23	Boeing	747 and 767 Series
2000-11-09		Airbus	A319, A320, and A321 Series
2000-11-10	S 94-18-03	Rolls-Royce	Engine: RB211-22B and –524 Series
2000-11-11		Boeing	777-200 Series
2000-11-12		General Electric Company	Engine: CF6-45/50 Series
2000-11-13		Fokker Services	F.28 Mark 1000, 2000, 3000, and 4000 Series
2000-11-15		AlliedSignal (Honeywell)	Engine: ALF502R and LF507 Series
2000-11-19		Boeing	767-200 and –300 Series
2000-11-20		Bombardier Inc.	DHC-8-100 and –300 Series
2000-11-21		Airbus Industrie	A319, A320, and A321 Series
2000-11-22		Allison Engine	Engine: AE 3007A, AE3007A1/1, AE 3007A1/2, +
2000-11-23		Airbus Industrie	A300, A310, and A300-600 Series
2000-11-24		British Aerospace Regional	ATP
2000-11-25		Airbus Industrie	A320-232 and –233 Series
2000-11-26		Airbus Industrie	A330 and A340 Series
2000-11-27		Airbus Industrie	A319, A320, and A321 Series
2000-11-28		Boeing	747-400 , 767-200 and –300 Series
2000-11-29		Fokker Services	F27 Mark 050, 100, 200, 300, 400, 500, 600, +
2000-12-01	S 99-08-16	CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, -3C, -5, -5B, +
2000-12-02	S 99-08-15	Pratt & Whitney	Engine: PW4050, PW4052, PW4056, PW4060, +
2000-12-04	S 97-11-01	Airbus Industrie	A319, A320, and A321 Series
2000-12-05	S 99-08-11	International Aero Engines	Engine: AG (IAE) V2500-A1/-A5/-D5 Series
2000-12-06		Airbus Industrie	A330 and A340 Series
2000-12-07		Saab Aircraft	SAAB SF340A, and SAAB 340B Series
2000-12-15		Dassault Aviation	Falcon 2000, Mystere-Falcon 900, Falcon 900EX, +

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95-26-03	S 95-15-51	Pratt & Whitney	Engine: JT8D-1, -1A, -1B, -7, -7A, -7B, -9, -9A, -11, -15, +
2000-12-08		General Electric Company	Engine: CF6-80C2A1/A2/A3/A5/A5F/A8/D1F
2000-12-11	S 95-07-05	Airbus Industrie	A300-600 Series
2000-12-12	S 95-10-03	Airbus Industrie	A300, A300-600, A310 Series
2000-12-13	S 97-21-10	Airbus Industrie	A319, A320, and A321 Series
2000-12-14		SAAB Aircraft	SF340A and 340B Series
2000-12-16	S 99-05-06	Boeing	747 Series
2000-12-17		Boeing	767 Series
2000-12-18		Rolls Royce	Engine: Dart 511, 511-7E, 514-7, 528, 528-7E, 529-7E, +
2000-12-19		Boeing	747 Series
2000-12-20		Airbus Industrie	A310 Series
2000-12-21		Boeing	747-400 Series
2000-13-02		Embraer-Empresa Brasileira	EMB-135 and EMB-145 Series
2000-13-03		McDonnell Douglas	DC-8 Series
2000-13-04	S 99-25-13 C1	Boeing	777-200 and –300 Series

Biweekly 2000-14

2000-09-01 R1	S 93-20-02	McDonnell Douglas	DC-8 Series
2000-13-01		Allison Engine	Engine: AE 3007A and AE 3007C Series
2000-13-05		Rolls-Royce	Engine: RB211 Trent 768-60, Trent 772-60, +
2000-13-07		Airbus Industrie	A330 and A340 Series
2000-13-09		SAAB Aircraft	SAAB 2000 Series
2000-13-51	E	Boeing	737-200 and –300 Series
2000-14-08		New Piper Aircraft	PA-42, PA-42-720, PA-42-720R, and PA-42-1000

Biweekly 2000-15

2000-12-21	COR	Boeing	747-400 Series
2000-13-51		Boeing	737-200 and -300 Series
2000-14-01		Boeing	747 Series
2000-14-02		Boeing	737-600, -700, and -800 Series
2000-14-03		SAAB Aircraft	SF340A and 340B Series
2000-14-04		Boeing	747 Series
2000-14-05		Boeing	777 Series
2000-14-06	S 98-21-29	Boeing	747 Series
2000-14-07	S 97-25-15	Boeing	727 Series
2000-14-09		Short Brothers	SD3-60 Series
2000-14-10	S 96-07-01	McDonnell Douglas	DC-10-10, -15, -30, and -40 Series and MD-10-10F and +
2000-14-11		Boeing	747 Series
2000-14-12		McDonnell Douglas	MD-11 Series
2000-14-13		Boeing	737-200, -300, -400, and -500 Series
2000-14-14		BFGoodrich	Appliance: Main brake assemblies
2000-14-15		Airbus Industrie	A319, A320, and A321 Series
2000-14-17	S 96-21-02	Bombardier	CL-600-2B19 Series
2000-15-02		Boeing	747-400 Series
2000-15-51	E	Cessna	560XL

Biweekly 2000-16

90-15-12	R1	Boeing	727 Series
95-19-08	R1	Boeing	727-100 and –200 Series
2000-10-23	C, S 97-26-21	Boeing	747-100, 747-200, 747-300, 747SR, and 747SP Series
2000-11-06	COR	Boeing	767 Series
2000-14-18		McDonnell Douglas	MD-11 Series

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Biweekly 2000-16...Cont'd

2000-15-01		CFM International	Engine: CFM56-2, -2A, -2B, -3, -3B, -3C, -5, -5A, -5B, +
2000-15-04	S 99-15-08	Boeing	747-200 and -300 Series
2000-15-05		McDonnell Douglas	DC-10-10, -10F, -15, -30, -30F (KC-10A and KDC-10 +
2000-15-06		McDonnell Douglas	DC-10 and DC-10-10F, -30F (KC-10A and KDC-10 +
2000-15-07		McDonnell Douglas	DC-10 Series
2000-15-08	S 98-20-20	Boeing	747 Series
2000-15-09		AlliedSignal Inc.	Engine: TFE731-2, -3, -4, and -5 Series
2000-15-11		McDonnell Douglas	DC-8 Series
2000-15-12		Boeing	737-100, -200, and -200C Series
2000-15-13	S 99-09-04	McDonnell Douglas	MD-11 Series
2000-15-14		McDonnell Douglas	MD-11 Series
2000-15-15	S 2000-03-51	McDonnell Douglas	DC-9, MD-90-30, 717-200, and MD-88
2000-15-16		Boeing	737, 757, 767, and 777 Series
2000-15-17		McDonnell Douglas	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), +
2000-15-18	S 96-17-04	Boeing	737-100 and -200 Series
2000-15-51		Cessna	560XL

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

REVISION Issued July 2000

90-15-12 R1 BOEING: Amendment 39-11838. Docket 2000-NM-248-AD. Revises AD 90-15-12, Amendment 39-6663.

Applicability: Model 727 series airplanes, modified by installation of Pratt and Whitney JT8D-217C or -219 engines in accordance with Valsan Supplemental Type Certificate (STC) SA4363NM, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the nut coming off the through-bolt allowing the through-bolt to migrate out of the engine mount flange and cone bolt and possible separation of the engine, accomplish the following:

Inspection/Corrective Action

(a) Within 48 clock hours (not flight hours) after receipt of Telegraphic AD T90-11-53, dated May 24, 1990, inspect the through-bolt nut, part number SPS83978-1216, for proper torque and for certain conditions as specified in Valsan Operator Service Letter OSL-727RE-007, Revision 1, dated May 23, 1990, in accordance with the service letter. If any discrepancies are found, prior to further flight, take corrective action in accordance with the service letter.

(b) Repeat the inspections required by paragraph (a) of this AD thereafter at intervals not to exceed 35 flight hours.

Reporting Requirement

(c) Within 10 days after performing the inspection required by paragraph (a) of this AD, submit a report of any discrepancies discovered to the Manager, Los Angeles Manufacturing Inspection District Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137. The report must include the airplane's serial number.

Installation

(d) Within 60 days after July 31, 1990 (the effective date of AD 90-15-12, amendment 39-6663), install anti-rotation plates in accordance with Valsan Service Bulletin 71-002, dated June 1, 1990. This modification constitutes terminating action for the repetitive inspections required by paragraph (a) and (b) of this AD.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(g) This amendment becomes effective on August 15, 2000.

FOR FURTHER INFORMATION CONTACT: Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

Issued in Renton, Washington, on July 25, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

REVISION Issued July 2000

95-19-08 R1 BOEING: Amendment 39-11839. Docket 2000-NM-249-AD. Revises AD 95-19-08, Amendment 39-9370.

Applicability: Model 727-100 and -200 series airplanes equipped with an engine nose cowl for engine numbers 1 and 3, installed in accordance with Supplemental Type Certificate (STC) SA4363NM, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the attach bolts on the nose cowl of the engine from becoming loose, and subsequent separation of the nose cowl from the engine, accomplish the following:

Replacement

(a) Within 12 months after October 20, 1995 (the effective date of AD 95-19-08, amendment 39-9370), replace the attaching nutplates of the No. 1 and No. 3 engine nose cowls with washers and self-locking nuts in accordance with VALSAN B727-RE Service Bulletin 71-006, Revision 1, dated March 3, 1995.

Spares

(b) As of October 20, 1995, no person shall install a nose cowl having VALSAN part number 259-0002-501 or 259-0002-503 on any airplane.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The replacement shall be done in accordance with VALSAN B727-RE Service Bulletin 71-006, Revision 1, dated March 3, 1995. This incorporation by reference was approved previously by the Director of the Federal Register as of October 20, 1995 (60 FR 48630, September 20, 1995). Copies may be obtained from VALSAN Partnership Ltd., Aviation Products Management, Product Support Office, 39450 Third Street East, suite 121, Palmdale, California 93550. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on August 16, 2000.

FOR FURTHER INFORMATION CONTACT: Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

Issued in Renton, Washington, on July 25, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

CORRECTION Issued July 2000
2000-10-23 BOEING: Amendment 39-11748. Docket 97-NM-88-AD. Supersedes AD 97-26-21, Amendment 39-10264.

Applicability: Model 747-100, 747-200, 747-300, 747SR, and 747SP series airplanes; having line positions 201 through 886 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the longeron splice fittings at stringer 11, which could result in reduced controllability of the horizontal stabilizer, accomplish the following:

Initial Inspection

(a) Perform a one-time detailed visual inspection to detect cracking of the longeron fittings at stringer 11, on the left and right sides at body station 2598, at the time specified in paragraph (a)(1) or (a)(2) of this AD, as applicable, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2410, Revision 2, dated October 30, 1997, including Addendum; or Boeing Service Bulletin 747-53A2410, Revision 3, dated March 12, 1998, including Addendum. After the effective date of this AD, only Revision 3 shall be used.

(1) For airplanes that have accumulated fewer than 17,000 total flight cycles and 63,000 total flight hours as of the effective date of this AD: Inspect at the later of the times specified in paragraph (a)(1)(i) or (a)(1)(ii) of this AD.

(i) Prior to the accumulation of 17,000 total flight cycles or 63,000 total flight hours, whichever occurs first.

(ii) Within 1,800 flight cycles or 7,000 flight hours after the effective date of this AD, whichever occurs first.

(2) For airplanes that have accumulated 17,000 total flight cycles or more, or 63,000 total flight hours or more, as of the effective date of this AD: Inspect at the earlier of the times specified in paragraphs (a)(2)(i) and (a)(2)(ii) of this AD.

(i) Prior to the accumulation of 22,000 total flight cycles or 78,000 total flight hours, whichever occurs first.

(ii) Within 1,800 flight cycles or 7,000 flight hours after the effective date of this AD, whichever occurs first.

NOTE 2: Where there are differences between the AD and the service bulletin, the AD prevails.

NOTE 3: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Repetitive Inspections

(b) If no crack is found during the inspection required by paragraph (a) of this AD, repeat the inspection one time at the later of the times specified in paragraphs (b)(1) and (b)(2) of this AD, and thereafter at intervals not to exceed 3,000 flight cycles or 18,000 flight hours, whichever occurs first.

(1) Within 3,000 flight cycles or 18,000 flight hours after accomplishment of the most recent inspection, whichever occurs first.

(2) Within 1,800 flight cycles or 7,000 flight hours after the effective date of this AD, whichever occurs first.

Replacement and Repetitive Inspections

(c) If any crack is found during any inspection required by paragraph (a) or (b) of this AD: Prior to further flight, replace the cracked fitting with a new fitting, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2410, Revision 2, dated October 30, 1997, including Addendum; or Boeing Service Bulletin 747-53A2410, Revision 3, dated March 12, 1998, including Addendum. After the effective date of this AD, only Revision 3 shall be used. Then, repeat the inspection specified in paragraph (a) of this AD at the later of the times specified in paragraphs (c)(1) and (c)(2) of this AD, and thereafter at intervals not to exceed 3,000 flight cycles or 18,000 flight hours, whichever occurs first.

(1) Within 17,000 flight cycles or 63,000 flight hours after replacement, whichever occurs first.

(2) Within 1,800 flight cycles or 7,000 flight hours after the effective date of this AD, whichever occurs first.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with Boeing Alert Service Bulletin 747-53A2410, Revision 2, including Addendum, dated October 30, 1997; or Boeing Service Bulletin 747-53A2410, Revision 3, including Addendum, dated March 12, 1998.

(1) The incorporation by reference of Boeing Service Bulletin 747-53A2410, Revision 3, including Addendum, dated March 12, 1998, was approved previously by the Director of the Federal Register as of June 30, 2000 (65 FR 34061, May 26, 2000).

(2) The incorporation by reference of Boeing Alert Service Bulletin 747-53A2410, Revision 2, including Addendum, dated October 30, 1997, was approved previously by the Director of the Federal Register as of January 13, 1998 (62 FR 67550, December 29 1997).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) The effective date of this amendment remains June 30, 2000.

FOR FURTHER INFORMATION CONTACT: Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

Issued in Renton, Washington, on July 28, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

CORRECTION Issued July 2000
2000-11-06 BOEING: Amendment 39-11754. Docket 98-NM-316-AD.

Applicability: All Model 767 series airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent exposure of electrical conductor, which could permit arcing from the wire to the conduit and create a potential for a fuel tank fire or explosion, accomplish the following:

Inspections

(a) Perform a detailed visual inspection to detect discrepancies--including the presence of splices, cuts, splits, holes, worn areas, and lacing ties installed on the outside of the sleeves (except at the sleeve ends)--of the Teflon sleeves surrounding the wiring of the fuel tank boost pumps and override/jettison pumps, at the earlier of the times specified in paragraphs (a)(1) and (a)(2) of this AD, in accordance with Boeing Service Bulletin 767-28A0053, Revision 1, dated August 5, 1999. Repeat the inspection thereafter at intervals not to exceed 60,000 flight hours or 30,000 flight cycles, whichever occurs first.

(1) Prior to the accumulation of 50,000 total flight hours, or within 90 days after the effective date of this AD, whichever occurs later.

(2) Within 18 months after the effective date of this AD.

NOTE 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

Corrective Actions

(b) If any discrepancy is detected during any inspection required by paragraph (a) of this AD: Prior to further flight, remove the Teflon sleeves and perform a detailed visual inspection to detect damage of the wiring, in accordance with paragraph D. of the Accomplishment Instructions of Boeing Service Bulletin 767-28A0053, Revision 1, dated August 5, 1999.

(1) If no damage to the wiring is detected, prior to further flight, install new Teflon sleeves in accordance with the service bulletin.

(2) If any damage to the wiring is detected, prior to further flight, accomplish the requirements of paragraph (c) of this AD.

(c) If any damage to the wiring is detected during any inspection required by paragraph (b) of this AD: Prior to further flight, perform a detailed visual inspection to determine if the wiring damage was caused by arcing, in accordance with paragraph D. of the Accomplishment Instructions of Boeing Service Bulletin 767-28A0053, Revision 1, dated August 5, 1999.

(1) If the wire damage was not caused by arcing: Prior to further flight, repair any damaged wires or replace the wires with new or serviceable wires, as applicable, and install new Teflon sleeves; in accordance with the service bulletin.

(2) If any damage caused by arcing is found: Prior to further flight, perform an inspection for signs of fuel inside the conduit or on the wires, in accordance with the service bulletin.

(i) If no sign of fuel is found, accomplish the actions specified by paragraphs (c)(2)(i)(A), (c)(2)(i)(B), (c)(2)(i)(C), and (c)(2)(i)(D) of this AD.

(A) Prior to further flight, repair the wires or replace the wires with new or serviceable wires, as applicable, in accordance with the service bulletin.

(B) Prior to further flight, install new Teflon sleeves, in accordance with the service bulletin.

(C) Repeat the inspection for signs of fuel inside the conduit thereafter at intervals not to exceed 500 flight hours, until the requirements of paragraph (c)(2)(i)(D) of this AD have been accomplished. If any fuel is found inside the conduit during any inspection required by this paragraph, prior to further flight, replace the conduit with a new or serviceable conduit in accordance with the service bulletin. Thereafter, repeat the inspection specified in paragraph (a) of this AD at intervals not to exceed 60,000 flight hours or 30,000 flight cycles, whichever occurs first.

(D) Within 6,000 flight hours or 18 months after the initial fuel inspection specified by paragraph (c)(2) of this AD, whichever occurs first, replace the conduit with a new or serviceable conduit, in accordance with the service bulletin. Such conduit replacement constitutes terminating action for the repetitive fuel inspections required by paragraph (c)(2)(i)(C) of this AD.

(ii) If any fuel is found in the conduit or on any wire: Prior to further flight, replace the conduit with a new or serviceable conduit, replace damaged wires with new or serviceable wires, and install new Teflon sleeves; in accordance with the service bulletin. Thereafter, repeat the inspection specified in paragraph (a) of this AD at intervals not to exceed 60,000 flight hours or 30,000 flight cycles, whichever occurs first.

Pump Retest

(d) For any wire bundle removed and reinstalled during any inspection required by this AD: Prior to further flight after such reinstallation, retest the fuel pump in accordance with paragraph G., H., I., or J., as applicable, of the Accomplishment Instructions, of Boeing Service Bulletin 767-28A0053, Revision 1, dated August 5, 1999.

Reporting Requirement

(e) Submit a report of positive inspection findings (findings of discrepancies only), along with any damaged wiring and sleeves, to the Seattle Manufacturing Inspection District Office (MIDO), 2500 East Valley Road, Suite C-2, Renton, Washington 98055-4056; fax (425) 227-1159; at the applicable time specified in paragraph (e)(1) or (e)(2) of this AD. The report must include the airplane serial number; the number of total flight hours and flight cycles on the airplane; the location of the electrical cable on the airplane; and a statement indicating, if known, whether any wire has ever been removed and inspected during maintenance, along with the date (if known) of any such inspection. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

(1) For airplanes on which the initial inspection required by paragraph (a) of this AD is accomplished after the effective date of this AD: Submit the report within 10 days after performing the initial inspection.

(2) For airplanes on which the initial inspection required by paragraph (a) of this AD has been accomplished prior to the effective date of this AD: Submit the report for the initial inspection within 10 days after the effective date of this AD.

Alternative Methods of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(h) The actions shall be done in accordance with Boeing Service Bulletin 767-28A0053, Revision 1, dated August 5, 1999. This incorporation by reference was approved previously by the Director of the Federal Register as of July 6, 2000 (65 FR 34928, June 1, 2000). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(i) The effective date of this amendment remains July 6, 2000.

FOR FURTHER INFORMATION CONTACT: Holly Thorson, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1357; fax (425) 227-1181.

Issued in Renton, Washington, on July 25, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-14-18 MCDONNELL DOUGLAS: Amendment 39-11829. Docket 2000-NM-30-AD.

Applicability: Model MD-11 series airplanes, as listed in McDonnell Douglas Service Bulletin MD11-25A227, dated January 27, 2000; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure that the powered roller pans are positioned properly, accomplish the following:

(a) Within 18 months after the effective date of this AD, accomplish the actions specified in paragraphs (a)(1), (a)(2), and (a)(3) of this AD in accordance with McDonnell Douglas Service Bulletin MD11-25A227, dated January 27, 2000.

Inspection

(1) Perform a general visual inspection of the powered drive unit power wires within three feet of each affected powered drive unit termination for mechanical damage. If any damaged wire is detected, prior to further flight, repair the damaged wire.

Note 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Revise Wire Harnesses, Splice Wire, and Route and Install Parts

(2) Revise the wire harnesses, splice any additional length wire, and route and install parts.

Replacement

(3) Replace the floor panels with new and retained floor panels.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with McDonnell Douglas Service Bulletin MD11-25A227, dated January 27, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on August 11, 2000.

FOR FURTHER INFORMATION CONTACT: Brett Portwood, Technical Specialist, Systems Safety and Integration, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on July 14, 2000.
Donald L. Riggin, Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

CFM INTERNATIONAL
AIRWORTHINESS DIRECTIVES
ENGINE
LARGE AIRCRAFT

2000-15-01 CFM International: Amendment 39-11830. Docket 99-NE-40-AD.

Applicability

CFM International CFM56-2, -2A, -2B, -3, -3B, -3C, -5, -5A, -5B, -5C series engines installed on but not limited to McDonnell Douglas DC-8 series, Boeing 737 series, Airbus Industrie A319, A320, A321 and A340 series, as well as Boeing E-3, E-6, and KC-135 (military) series airplanes.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Required as indicated, unless accomplished previously.

To prevent fuel leakage from between the fuel pump filter cover and gear housing which could result in an engine fire and damage to the airplane, accomplish the following:

Inspections

(a) Perform initial and repetitive visual inspections of the fuel pump filter cover helicoil inserts and bolts for damage in accordance with Section 2, Accomplishment Instructions, of the applicable Service Bulletins (SBs) listed in paragraph (a)(5) of this AD, as follows:

(1) If the fuel pump has **not** been previously inspected prior to the effective date of this AD, inspect at the next fuel filter replacement, but not to exceed 200 cycles-in-service (CIS) after the effective date of this AD.

(2) If the fuel pump has been previously inspected prior to the effective date of this AD, inspect at the next fuel filter replacement.

(3) Thereafter, inspect at each fuel filter replacement.

Replacement or Repair

(4) If damage equals or exceeds the reject criteria stated in Section 2, Accomplishment Instructions, of the SBs listed in paragraph (a)(5) of this AD, prior to further flight remove the fuel pump from service and replace or repair the helicoil in accordance with Section 2, Accomplishment Instructions, of the SBs listed in paragraph (a)(5), (b) or (c) as applicable, of this AD.

Applicable Inspection SB

(5) Inspect and replace, if necessary, in accordance with the CFMI SB that applies to your engine from the following list:

CFM56-2 SB 73-110,	Revision 2,	dated April 29, 1999.
CFM56-2A SB 73-055,	Revision 1,	dated April 29, 1999.
CFM56-2B SB 73-076,	Revision 1,	dated April 29, 1999.
CFM56-3/3B/3C SB 73-126,	Revision 1,	ated April 29, 1999.
CFM56-5 SB 73-136,	Revision 2,	dated April 29, 1999.
CFM56-5B SB 73-056,	Revision 2,	dated April 29, 1999.
CFM56-5C SB 73-073,	Revision 2,	dated April 29, 1999.

Terminating Action

(b) Remove and replace the fuel pump with a newly manufactured or reworked fuel pump that incorporates a D-bolt filter cover attachment. This action must be done at the next engine or fuel pump shop visit, which ever occurs first, but no later than 5 years from the effective date of this AD in accordance with the CFMI SB that applies to your engine from the following list:

CFM56-2 SB 73-A113,		dated August 17, 1999.
CFM56-2A SB 73-A058,		dated August 17, 1999.
CFM56-2B SB 73-A079,	Revision 1,	dated October 22, 1999.
CFM56-3/3B/3C SB 73-A129,		dated August 17, 1999.
CFM56-5 SB 73-A143,		dated June 18, 1999.
CFM56-5B SB 73-A062,		dated June 18, 1999.
CFM56-5C SB 73-A078,		dated June 21, 1999.

Installation of a new or reworked fuel pump that incorporates a D-bolt filter cover attachment in accordance with this paragraph constitutes terminating action to the inspections required by paragraph (a) of this AD.

(c) An alternative terminating action is an on-wing repair that may be performed. Terminating action must be accomplished no later than 5 years from the effective date of this AD, in accordance with one of the following CFMI SB's that applies to your engine:

CFM56-2 SB 73-109,	Revision 1,	dated January 7, 1998.
CFM56-2A SB 73-054,	Revision 1,	dated January 7, 1998.
CFM56-2B SB 73-074,	Revision 1,	dated January 12, 1998.
CFM56-3/3B/3C SB 73-125,	Revision 1,	dated January 7, 1998.
CFM56-5 SB 73-135,	Revision 1,	dated January 7, 1998.
CFM56-5B SB 73-055,	Revision 1,	dated January 7, 1998.
CFM56-5C SB 73-070,	Revision 1,	dated January 7, 1998.

Prohibited Inspection or Replacement

(d) Inspection, replacement or repair of fuel pumps, in accordance with paragraph (a), (b) or (c) of this AD, on all engines installed on the same airplane by the same individual prior to the same flight is prohibited.

Definitions

(e) For the purpose of this AD:

(1) A serviceable part is defined as a part with gear housing helicoil inserts that meet the inspection requirements of the applicable CFMI SBs listed in paragraph (a)(5) of this AD. A serviceable part is also defined as a fuel pump that has been newly manufactured, reworked or repaired in accordance with the applicable CFMI SBs listed in paragraphs (a)(5), (b) or (c) of this AD.

(2) A fuel pump shop visit is defined as introduction of an engine into a shop for the purpose of removal of the fuel pump from the gearbox.

(3) An engine shop visit is defined as introduction of an engine into a shop for the purpose of maintenance or inspection.

Alternative Methods of Compliance

(f) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Ferry Flights

(g) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Incorporation By Reference Material

(h) The FAA has reviewed and approved the technical content of the listed CFMI Service Bulletins (SBs). The actions required by this AD shall be done in accordance with the following CFMI SBs:

3 2000-15-01

Document No.	Pages	Revision	Date
CFM56-2 SB No. 73-110……. Total pages: 10.	1-10	2	April 29, 1999
CFM56-2A SB No. 73-055……. Total pages: 10.	1-10	1	April 29, 1999
CFM56-2B SB No. 73-076……. Total pages: 10.	1-10	1	April 29, 1999
CFM56-3/3B/3C SB No. 73-126……. Total pages: 10.	1-10	1	April 29, 1999
CFM56-5 SB No. 73-136……. Total pages: 10.	1-10	2	April 29, 1999
CFM56-5B SB No. 73-056……. Total pages: 10.	1-10	2	April 29, 1999
CFM56-5C SB No. 73-073……. Total pages: 10.	1-10	2	April 29, 1999
CFM56-2 SB No. 73-A113…….. 708600-73-113…… Total pages: 27.	1-6 1-21	Original Original	August 17, 1999 May 24, 1999
CFM56-2A SB No. 73-A058…….. 708400-73-101…… Total pages: 17.	1-3 1-14	Original Original	August 17, 1999 April 16, 1999
CFM56-2B SB No. 73-A079…….. 708600-73-112…… Total pages: 23.	1-4 1-19	1 Original	October 22, 1999 April 14, 1999
CFM56-3/3B/3C SB No. 73-A129…….. 708600-73-110…… Total pages: 23.	1-4 1-19	Original Original	August 17, 1999 April 14, 1999
CFM56-5 SB No. 73-A143…….. 714900-73-106…… Total pages: 18.	1-4 1-14	Original Original	June 18, 1999 April 9, 1999
CFM56-5B SB No. 73-A062…….. 714900-73-107…… Total pages: 19.	1-4 1-15	Original Original	June 18, 1999 April 13, 1999
CFM56-5C SB No. 73-A078…….. 714900-73-108…… Total pages: 19.	1-4 1-15	Original Original	June 21, 1999 April 13, 1999

Document No.	Pages	Revision	Date
CFM56-2 SB No. 73-109……. Total pages: 13.	1-13	1	January 7, 1998
CFM56-2A SB No. 73-054……. Total pages: 13.	1-13	1	January 7, 1998
CFM56-2B SB No. 73-074……. Total pages: 13.	1-13	1	January 12, 1998
CFM56-3/3B/3C SB No. 73-125……. Total pages: 13.	1-13	1	January 7, 1998
CFM56-5 SB No. 73-135……. Total pages: 13.	1-13	1	January 7, 1998
CFM56-5B SB No. 73-055……. Total pages: 13.	1-13	1	January 7, 1998
CFM56-5C SB No. 73-070……. Total pages: 13.	1-13	1	January 7, 1998

The incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552 (a) and 1 CFR part 51. Copies may be obtained from CFM International, Technical Publications Department, 1 Neumann Way, Cincinnati, OH 45215; telephone: (513) 552-2800, fax: (513) 552-2816. Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA 01803-5299; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(i) This amendment becomes effective on October 2, 2000.

FOR FURTHER INFORMATION CONTACT: James Rosa, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone: (781) 238-7152, fax: (781) 238-7199.

Issued in Burlington, Massachusetts, on July 14, 2000.

David A. Downey, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-04 BOEING: Amendment 39-11833. Docket 99-NM-79-AD. Supersedes AD 99-15-08, Amendment 39-11227.

Applicability: Model 747-200 and -300 series airplanes equipped with General Electric Model CF6-80C2 series engines with Power Management Control engine controls, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure the integrity of the fail safe features of the thrust reverser system by preventing possible failure modes in the thrust reverser control system that can result in inadvertent deployment of a thrust reverser during flight, accomplish the following:

RESTATEMENT OF THE ORIGINAL REQUIREMENTS OF AD 95-06-01:

Repetitive Tests and Inspections

(a) Within 90 days after April 13, 1995 (the effective date of AD 95-06-01, amendment 39-9171), perform tests of the position switch module and the cone brake of the center drive unit (CDU) on each thrust reverser, and perform an inspection to detect damage to the bullnose seal on the translating sleeve on each thrust reverser, in accordance with paragraphs III.A. through III.C. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994. Repeat the tests and inspection thereafter at intervals not to exceed 1,000 hours time-in-service until the functional test required by paragraph (d) of this AD is accomplished.

(b) Within 9 months after April 13, 1995, perform inspections and functional tests of the thrust reverser control and indication system in accordance with paragraphs III.D. through III.F., III.H., and III.I. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994. Repeat these inspections and functional tests thereafter at intervals not to exceed 18 months.

Corrective Action

(c) If any of the inspections and/or functional tests required by paragraphs (a) and (b) of this AD cannot be successfully performed, or if any discrepancy is found during those inspections and/or functional tests, accomplish either paragraph (c)(1) or (c)(2) of this AD.

(1) Prior to further flight, correct the discrepancy found, in accordance with Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994. Or

(2) The airplane may be operated in accordance with the provisions and limitations specified in an operator's FAA-approved Minimum Equipment List (MEL), provided that no more than one thrust reverser on the airplane is inoperative.

RESTATEMENT OF REQUIREMENTS OF AD 99-15-08:

Repetitive Tests/Terminating Action

(d) Within 1,000 hours time-in-service after the most recent test of the CDU cone brake performed in accordance with paragraph (a) of this AD, or within 650 hours time-in-service after August 25, 1999 (the effective date of AD 99-15-08, amendment 39-11227), whichever occurs first: Perform a functional test to detect discrepancies of the CDU cone brake on each thrust reverser, in accordance with Boeing Service Bulletin 747-78A2166, Revision 1, dated October 9, 1997, or paragraph III.B. of the Accomplishment

Instructions of Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994. Repeat the functional test thereafter at the interval specified in paragraph (d)(1) or (d)(2) of this AD, as applicable. Accomplishment of such functional test constitutes terminating action for the repetitive test of the CDU cone brake required by paragraph (a) of this AD; the position switch module tests and the bullnose seal inspections continue to be required as specified in paragraph (a) of this AD.

(1) For airplanes equipped with thrust reversers NOT modified in accordance with Boeing Service Bulletin 747-78-2144, Revision 1, dated April 11, 1996: Repeat the functional test at intervals not to exceed 650 hours time-in-service.

(2) For airplanes equipped with thrust reversers modified in accordance with Boeing Service Bulletin 747-78-2144, Revision 1, dated April 11, 1996: Repeat the functional test at intervals not to exceed 1,000 hours time-in-service.

Corrective Action

(e) If any functional test required by paragraph (d) of this AD cannot be successfully performed, or if any discrepancy is found during any functional test required by paragraph (d) of this AD, accomplish either paragraph (e)(1) or (e)(2) of this AD. (1) Prior to further flight, correct the discrepancy found, in accordance with Boeing Service Bulletin 747-78A2166, Revision 1, dated October 9, 1997, or paragraph III.B. of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994. Or

(2) The airplane may be operated in accordance with the provisions and limitations specified in the operator's FAA-approved MEL, provided that no more than one thrust reverser on the airplane is inoperative.

NEW REQUIREMENTS OF THIS AD:

Terminating Action

(f) Accomplish the requirements of paragraphs (f)(1) and (f)(2) of this AD at the times specified in those paragraphs. Accomplishment of the actions required by paragraph (f)(1) of this AD constitutes terminating action for the requirements of paragraphs (a), (b), (d), and (e) of this AD.

(1) Within 36 months after the effective date of this AD, accomplish the requirements of paragraphs (f)(1)(i) and (f)(1)(ii) of this AD.

(i) Install an actuation system lock bracket and fastening hardware to each thrust reverser in accordance with the Accomplishment Instructions of Lockheed Martin Service Bulletin 78-1007, Revision 1, dated March 18, 1997, or Middle River Aircraft Systems Service Bulletin 78-1007, Revision 2, dated March 10, 1998.

(ii) Install an actuation system lock (also called an electro-mechanical lock or electro-mechanical brake) on each thrust reverser in accordance with the Accomplishment Instructions of Lockheed Martin Service Bulletin 78-1020, Revision 2, dated March 20, 1997, or Middle River Aircraft Systems Service Bulletin 78-1020, Revision 3, dated March 16, 1998.

(2) Prior to or concurrent with the accomplishment of the requirements of paragraph (f)(1)(ii) of this AD, perform the thrust reverser wiring modifications of the wings, strut, and fuselage, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-78-2144, Revision 1, dated April 11, 1996.

Repetitive Tests

(g) Within 1,000 hours time-in-service after accomplishment of paragraph (f) of this AD, or within 1,000 hours time-in-service after the effective date of this AD, whichever occurs later: Perform a functional test to detect discrepancies of the CDU cone brake and actuation system lock on each thrust reverser, in accordance with Appendix 1 of this AD. Prior to further flight, correct any discrepancy detected and repeat the functional test of that repair, in accordance with the procedures described in the Boeing 747 Maintenance Manual. Repeat the functional tests thereafter at intervals not to exceed 1,000 hours time-in-service.

Alternative Methods of Compliance

(h) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 99-15-08, amendment 39-11227, are approved as alternative methods of compliance with the corresponding requirements specified in this AD.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(i) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(j) Except as provided by paragraphs (c)(2), (e)(2), and (g) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994; Boeing Service Bulletin 747-78A2166, Revision 1, dated October 9, 1997; Lockheed Martin Service Bulletin 78-1007, Revision 1, dated March 18, 1997; Middle River Aircraft Systems Service Bulletin 78-1007, Revision 2, dated March 10, 1998; Lockheed Martin Service Bulletin 78-1020, Revision 2, dated March 20, 1997; Middle River Aircraft Systems Service Bulletin 78-1020, Revision 3, dated March 16, 1998; or Boeing Service Bulletin 747-78-2144, Revision 1, dated April 11, 1996; as applicable.

(1) The incorporation by reference of Lockheed Martin Service Bulletin 78-1007, Revision 1, dated March 18, 1997; Middle River Aircraft Systems Service Bulletin 78-1007, Revision 2, dated March 10, 1998; Lockheed Martin Service Bulletin 78-1020, Revision 2, dated March 20, 1997; Middle River Aircraft Systems Service Bulletin 78-1020, Revision 3, dated March 16, 1998; and Boeing Service Bulletin 747-78-2144, Revision 1, dated April 11, 1996; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Lockheed Martin Service Bulletin 78-1007, Revision 1, dated March 18, 1997, contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1, 3, 4, 22-28	1	March 18, 1997
2, 5-21	Original	August 30, 1997

Lockheed Martin Service Bulletin 78-1020, Revision 2, dated March 20, 1997, contains the following list of effective pages:

Page Number	Revision Level Shown on Page	Date Shown on Page
1-5, 8, 12, 13, 15, 19-21, 23-36	2	March 20, 1997
6, 7, 9-11, 14, 16-18, 22, 37	1	January 17, 1996

(2) The incorporation by reference of Boeing Service Bulletin 747-78A2166, Revision 1, dated October 9, 1997, was approved previously by the Director of the Federal Register as of August 25, 1999 (64 FR 39003, July 21, 1999).

(3) The incorporation by reference of Boeing Alert Service Bulletin 747-78A2130, dated May 26, 1994, was approved previously by the Director of the Federal Register as of April 13, 1995 (60 FR 13623, March 14, 1995).

(4) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(k) This amendment becomes effective on September 6, 2000.

FOR FURTHER INFORMATION CONTACT: Larry Reising, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2683; fax (425) 227-1181.

Issued in Renton, Washington, on July 18, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

APPENDIX 1
THRUST REVERSER ELECTRO-MECHANICAL BRAKE AND CDU CONE BRAKE TEST

1. General

A. This procedure contains steps to do two checks:
(1) A check of the holding torque of the electro-mechanical brake.
(2) A check of the holding torque of the CDU cone brake.

2. Electro-Mechanical Brake and CDU Cone Brake Torque Check

A. Prepare to do the checks:
(1) Open the fan cowl panels.

B. Do a check of the torque of the electro-mechanical brake:
(1) Do a check of the electro-mechanical brake holding torque:
(a) Make sure the thrust reverser translating cowl is extended at least one inch.
(b) Make sure the CDU lock handle is released.
(c) Pull down on the manual release handle on the electro-mechanical brake until the handle fully engages the retaining clip.

NOTE: This will lock the electro-mechanical brake.

(d) With the manual drive lockout cover removed from the CDU, install a 1/4-inch extension tool and dial-type torque wrench into the drive pad.

NOTE: You will need a 24-inch extension to provide adequate clearance for the torque wrench.

(e) Apply 90 pound-inches of torque to the system.
i) The electro-mechanical brake system is working correctly if the torque is reached before you turn the wrench 450 degrees (1-1/4 turns).
ii) If the flexshaft turns more than 450 degrees before you reach the specified torque, you must replace the long flexshaft between the CDU and the upper angle gearbox.
iii) If you do not get 90 pound-inches of torque, you must replace the electro-mechanical brake.

(f) Release the torque by turning the wrench in the opposite direction until you read zero pound-inches.
i) If the wrench does not return to within 30 degrees of initial starting point, you must replace the long flexshaft between the CDU and upper angle gearbox.

(2) Fully retract the thrust reverser.

C. Do a check of the torque of the CDU cone brake:
(1) Pull up on the manual release handle to unlock the electro-mechanical brake.
(2) Pull the manual brake release lever on the CDU to release the cone brake.

NOTE: This will release the pre-load tension that may occur during a stow cycle.

(3) Return the manual brake release lever to the locked position to engage the cone brake.
(4) Remove the two bolts that hold the lockout plate to the CDU and remove the lockout plate.
(5) Install a 1/4-inch drive and a dial type torque wrench into the CDU drive pad.

CAUTION: DO NOT USE MORE THAN 100 POUND-INCHES OF TORQUE WHEN YOU DO THIS CHECK. EXCESSIVE TORQUE WILL DAMAGE THE CDU.

(6) Turn the torque wrench to try to manually extend the translating cowl until you get at lease 15-pound inches.

NOTE: The cone brake prevents movement in the extend direction only. If you try to measure the holding torque in the retract direction, you will get a false reading.

(a) If the torque is less than 15-pound-inches, you must replace the CDU.

D. Return the airplane to its usual condition:
(1) Re-install the lockout plate.
(2) Fully retract the thrust reverser (unless already accomplished).
(3) Pull down on the manual release handle on the electro-mechanical brake until the handle fully engages the retaining clip (unless already accomplished).

NOTE: This will lock the electro-mechanical brake.

(4) Close the fan cowl panels.

BW 2000-16

MCDONNELL DOUGLAS AIRWORTHINESS DIRECTIVES LARGE AIRCRAFT

2000-15-05 MCDONNELL DOUGLAS: Amendment 39-11834. Docket 99-NM-211-AD.

Applicability: Model DC-10-10, -10F, -15, -30, -30F (KC-10A and KDC-10 military), -40, and -40F series airplanes, as listed in McDonnell Douglas Alert Service Bulletin DC10-24A165, dated April 14, 1999; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To ensure that the wires that route from the main wire bundles to the main avionics rack (MAR) and associated brackets, clamps, braces, standoffs, and clips are installed properly, accomplish the following:

One-Time General Visual Inspection

(a) Within 60 days after the effective date of this AD, perform a one-time general visual inspection of the wiring and wire bundles of the aft MAR to determine if the wires are damaged, or riding or chafing on structure, clamps, braces, standoffs, or clips, and to detect damaged or out of alignment rubber cushion inserts of the wiring clamps; in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A165, dated April 14, 1999.

Note 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Note 3: Where there are differences between this AD and the referenced alert service bulletin, the AD prevails.

Note 4: The wording "main avionics rack" in this AD and the wording "main radio rack" in the alert service are used interchangeably.

Corrective Actions

(b) If any damaged wiring is detected during the inspection required by paragraph (a) of this AD, prior to further flight, repair in accordance with the alert service bulletin.

(c) If any wire/wire bundle is detected to be riding or chafing on the subject areas during the inspection required by paragraph (a) of this AD, prior to further flight, accomplish paragraphs (c)(1), (c)(2), and (c)(3) of this AD.

(1) Route and tie all wires/wire bundles so they are not in contact with adjacent wire bundles, clamps or structure, and install silicon rubber coated glass cloth wrapping on wiring, if necessary, in accordance with the alert service bulletin.

(2) Perform a general visual inspection of all brackets, clamps, braces, standoffs, and clips to make sure they are not bent or twisted and do not come in contact with wires/wire bundles, in accordance with the alert service bulletin. If any of these parts is bent or twisted or is in contact with wires/wire bundles, prior to further flight, reposition in accordance with the alert service bulletin.

(3) Perform a general visual inspection of the clamps for proper alignment or for damage of the rubber cushion, in accordance with the alert service bulletin. If any clamp is not aligned properly, prior to further flight, realign the clamp in accordance with the alert service bulletin. If any rubber cushion is damaged, prior to further flight, replace the clamp in accordance with the alert service bulletin.

(d) If any damaged rubber cushion insert is detected during the inspection required by paragraph (a) of this AD, prior to further flight, replace the clamp with a new or serviceable clamp in accordance with McDonnell Douglas Process Engineering Order DPS 1.834-7, Revision CF, dated June 29, 1999.

(e) If any rubber cushion insert is out of alignment, prior to further flight, visually realign the cushion.

Reporting Requirement

(f) Within 70 days after the effective date of this AD, submit a report of the results (both positive and negative findings) of the inspection required by paragraph (a) of this AD to the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, 3960 Paramount Boulevard, Lakewood, California 90712-4137; fax (562) 627-5210. Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

Alternative Methods of Compliance

(g) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 5: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(h) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(i) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A165, dated April 14, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(j) This amendment becomes effective on September 4, 2000.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

Issued in Renton, Washington, on July 19, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-06 MCDONNELL DOUGLAS: Amendment 39-11835. Docket 99-NM-214-AD.

Applicability: Model DC-10 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999; certificated in any category; except those airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration, and Model DC-10-10F, -30F (KC-10A and KDC-10 military), and -40F series airplanes.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent arcing of the power feeder cables against the fuselage structure, which could cause smoke and fire in the overhead of the main cabin, accomplish the following:

Inspection

(a) Within 6 months after the effective date of this AD, perform a general visual inspection of the power feeder cables in the cabin electrical system, airplane structure, and insulation blankets at station Y=1099.000 between longerons 9 and 10 (right side) for evidence of chafing and arcing damage, in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Condition 1 Corrective Action

(1) If no chafing or damage to the power feeder cables, structure, or insulation blankets is detected: Prior to further flight, install a standoff and clamp at station Y=1093.000, longeron 10, in accordance with Condition 1 of the Work Instructions of the service bulletin.

Condition 2 Corrective Action

(2) If any chafed power feeder cable is detected, and if no damage to adjacent structure or insulation blankets is detected: Prior to further flight, repair or replace the power feeder cables in the cabin electrical system with new power feeder cables; and install a standoff and clamp at station Y=1093.000, longeron 10, in accordance with Condition 2 of the Work Instructions of the service bulletin.

Condition 3 Corrective Action

(3) If any chafed power feeder cable is detected, and if any damage to the adjacent structure and/or insulation blankets is detected: Prior to further flight, accomplish the actions specified in paragraphs (a)(3)(i), (a)(3)(ii), (a)(3)(iii), and (a)(3)(iv) of this AD, as applicable, in accordance with Condition 3 of the Work Instructions of the service bulletin.

(i) Repair or replace the damaged power feeder cables in the cabin electrical system with new power feeder cables.

(ii) Repair or replace the damaged structure with new structure.

(iii) Repair or replace the damaged insulation blankets with new insulation blankets; however, insulation blankets made of metallized polyethyleneteraphthalate (MPET) may not be used.

(iv) Install a standoff and clamp at station Y=1093.000, longeron 10.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A163, dated July 28, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on September 4, 2000.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

Issued in Renton, Washington, on July 19, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS AIRWORTHINESS DIRECTIVES LARGE AIRCRAFT

2000-15-07 MCDONNELL DOUGLAS: Amendment 39-11836. Docket 99-NM-215-AD.

Applicability: Model DC-10 series airplanes, as listed in McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent chafing and arcing of the galley power feeder cables against the airplane structure due to insufficient clearance between the cables and the airplane structure, which could result in smoke and fire in the forward lower cargo compartment, accomplish the following:

Inspection, Installation of Spacers, and Corrective Actions, If Necessary

(a) Within 6 months after the effective date of this AD, perform a detailed visual inspection of the galley external power feeder cables and fuselage structure at station Y=635.000 to detect chafing or arcing damage to the cables and structure or to detect arcing damage to the insulation blankets, in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If any damage or chafing is detected, prior to further flight, accomplish the actions specified in paragraphs (a)(1)(i), (a)(1)(ii), (a)(1)(iii), and (a)(1)(iv) of this AD, as applicable, in accordance with Condition 2 of the Accomplishment Instructions of the service bulletin.

(i) Repair or replace the chafed cables with new cables.

(ii) Repair the damaged frame.

(iii) Replace the damaged insulation blanket with a new blanket; however, insulation blankets made of metallized polyethyleneteraphthalate (MPET) may not be used.

(iv) Install spacers between the galley power feeder cable clamps and fuselage structure.

(2) If no damage or chafing is detected, prior to further flight, install spacers between the galley power feeder cable clamps and fuselage structure in accordance with Condition 1 of the Accomplishment Instructions of the service bulletin.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin DC10-24A162, dated July 28, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on September 4, 2000.

FOR FURTHER INFORMATION CONTACT: Natalie Phan-Tran, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5343; fax (562) 627-5210.

Issued in Renton, Washington, on July 19, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-08 BOEING: Amendment 39-11840. Docket 98-NM-285-AD. Supersedes AD 98-20-20, Amendment 39-10786.

Applicability: Model 747 series airplanes, line numbers 1 through 671 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (j)(1) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct fatigue cracking of the bulkhead web, which could result in rapid depressurization of the airplane, and consequent reduced controllability of the airplane, accomplish the following:

RESTATEMENT OF ACTIONS REQUIRED BY AD 98-20-20, AMENDMENT 39-10786:

Initial Detailed Visual Inspection

(a) Within 750 landings after December 10, 1987 (the effective date for AD 87-23-10, amendment 39-5758), unless accomplished within the last 1,250 landings [for airplanes subject to a 2,000-landing repeat inspection interval in accordance with paragraph (b) of this AD], or unless accomplished within the last 250 landings [for airplanes subject to a 1,000-landing repeat inspection interval in accordance with paragraph (b) of this AD], perform a detailed visual inspection; in accordance with Boeing Service Bulletin 747-53-2275, dated March 26, 1987, Revision 1, dated August 13, 1987, Revision 2, dated March 31, 1988, Revision 3, dated March 29, 1990, Revision 4, dated March 26, 1992, or Revision 5, dated January 16, 1997, or Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998; of the aft side of the entire Body Station (BS) 2360 aft pressure bulkhead for damage such as dents, tears, nicks, gouges, or scratches; and cracks at splices and doublers, and around the Auxiliary Power Unit pressure pan cutout; and, for Group 4 airplanes only, inspect from the forward side, the area adjacent to the window cutout for damage or cracks.

NOTE 2: Notwithstanding provisions to the contrary in AD 87-23-10, and in Boeing Service Bulletin 747-53-2275, dated March 26, 1987, Revision 1, dated August 13, 1987, Revision 2, dated March 31, 1988, Revision 3, dated March 29, 1990, Revision 4, dated March 26, 1992, and Revision 5, dated January 16, 1997: For Model 747SR airplanes operating at a cabin pressure differential lower than 8.6 pounds-per-square-inch (psi), an adjustment factor of 1.2 shall NOT be used after October 7, 1998 (the effective date for AD 98-20-20), as a multiplier for inspection thresholds and intervals specified in this AD.

NOTE 3: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

Repetitive Detailed Visual Inspections

(b) After initial compliance with paragraph (a) of this AD, continue to inspect as follows:

(1) For Group 1 airplanes, repeat the inspections required by paragraph (a) of this AD, at intervals not to exceed 2,000 landings.

(2) For Groups 2 and 3 airplanes, repeat the inspections required by paragraph (a) of this AD, at intervals not to exceed 1,000 landings; or optionally, at the applicable time specified in paragraph (b)(2)(i) or (b)(2)(ii) of this AD.

(i) For Group 2 airplanes that operate the entire interval with aft lavatory complexes or galleys adjacent to bulkheads, repeat the inspections required by paragraph (a) of this AD at intervals not to exceed 2,000 landings.

(ii) For Groups 2 and 3 airplanes that operate the entire interval with an intact protective shield on the lower half of the forward side of the bulkhead, repeat the inspections required by paragraph (a) of this AD at intervals not to exceed 2,000 landings; and perform a detailed visual inspection of the protective shield for damage in accordance with Boeing Service Bulletin 747-53-2275, dated March 26, 1987, Revision 1, dated August 13, 1987, Revision 2, dated March 31, 1988, Revision 3, dated March 29, 1990, Revision 4, dated March 26, 1992, or Revision 5, dated January 16, 1997, or Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998, at intervals not to exceed 1,000 landings. If damage is found to the protective shield that exceeds the limits indicated in the service bulletin, prior to further flight, repeat the inspection required by paragraph (a) of this AD.

(3) For Group 4 airplanes, repeat the inspections required by paragraph (a) of this AD at intervals not to exceed 1,000 landings.

Repetitive Eddy Current, Ultrasonic, and X-Ray Inspections

(c) Within 750 landings after December 10, 1987, or prior to the accumulation of 20,000 total landings, whichever occurs later, unless accomplished within the last 3,250 landings; and at intervals thereafter not to exceed 4,000 landings; perform eddy current, ultrasonic, and X-ray inspections of the aft side of the BS 2360 aft pressure bulkhead for cracks; in accordance with Boeing Service Bulletin 747-53-2275, dated March 26, 1987, Revision 1, dated August 13, 1987, Revision 2, dated March 31, 1988, Revision 3, dated March 29, 1990, Revision 4, dated March 26, 1992, or Revision 5, dated January 16, 1997, or Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998.

Repetitive Detailed Visual Inspections

(d) Within 750 landings after December 10, 1987, or prior to the accumulation of 20,000 total landings, whichever occurs later, unless accomplished within the last 6,250 landings; and thereafter at intervals not to exceed 7,000 landings until the inspection required by paragraph (g) of this AD is accomplished: Perform a detailed visual inspection to detect cracking of the BS 2360 aft pressure bulkhead web-to-Y-ring lap joint area between radial stiffeners from the forward side of the bulkhead, in accordance with Boeing Service Bulletin 747-53-2275, dated March 26, 1987, Revision 1, dated August 13, 1987, Revision 2, dated March 31, 1988, Revision 3, dated March 29, 1990, Revision 4, dated March 26, 1992, or Revision 5, dated January 16, 1997, or Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998.

Repair

(e) If any cracking or damage is found during any inspection required by paragraph (a), (b), (c), or (d) of this AD, repair prior to further flight in accordance with Boeing Service Bulletin 747-53-2275, dated March 26, 1987, Revision 1, dated August 13, 1987, Revision 2, dated March 31, 1988, Revision 3, dated March 29, 1990, Revision 4, dated March 26, 1992, or Revision 5, dated January 16, 1997, or Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998.

Cabin Pressure Differential

(f) For the purpose of complying with this AD, the number of landings may be determined to equal the number of pressurization cycles where the cabin pressure differential was greater than 2.0 psi.

Initial Detailed Visual Inspection

(g) Perform a detailed visual inspection from the forward side of the bulkhead of the upper segment of the bulkhead web at BS 2360 to detect cracking, in accordance with Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998, at the earlier of the times specified in paragraphs (g)(1) and (g)(2) of this AD. Accomplishment of this inspection terminates the repetitive inspection requirement of paragraph (d) of this AD.

(1) Within 7,000 landings after the most recent detailed visual inspection accomplished in accordance with paragraph (d) of this AD.

(2) At the latest of the times specified in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.

(i) Prior to the accumulation of 20,000 total landings.

(ii) Within 1,500 landings after the most recent detailed visual inspection accomplished in accordance with paragraph (d) of this AD.

(iii) Within 90 days after October 7, 1998 (the effective date of AD 98-20-20).

Follow-On Action: High Frequency Eddy Current Inspection

(h) If any cracking is detected during the detailed visual inspections required by paragraph (g) of this AD, prior to further flight, accomplish a surface probe high frequency eddy current (HFEC) inspection from the forward side of the bulkhead to detect cracking of the upper and lower segments of the bulkhead web around the fasteners that attach the web to the outer chord of the Y-ring, in accordance with Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998. For the inspection of the lower segment of the bulkhead web, the area between the 149 degree radial zee stiffeners may be omitted. Repair any cracking, prior to further flight, in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings.

NEW REQUIREMENTS OF THIS AD:

Repetitive Detailed Visual and HFEC Inspections

(i) If no cracking is detected during the detailed visual inspection required by paragraph (g) of this AD, within 1,500 flight cycles after accomplishment of that inspection or within 250 flight cycles after the effective date of this AD, whichever occurs later: Repeat the detailed visual inspection, as specified in paragraph (g); and perform a surface probe HFEC inspection from the forward side of the bulkhead to detect cracking of the upper and lower segments of the bulkhead web, in accordance with Figure 15 of Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998. For the inspection of the lower segment of the bulkhead web, the area between the 149 degree radial zee stiffeners may be omitted.

(1) If no cracking is detected, repeat the detailed visual inspection thereafter at intervals not to exceed 1,500 flight cycles; and repeat the surface probe HFEC inspection thereafter at intervals not to exceed 3,000 flight cycles.

Repair

(2) If any cracking is detected, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate, or a Boeing Company Designated Engineering Representative who has been authorized by the FAA to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

Alternative Methods of Compliance

(j) (1) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

(2) Alternative methods of compliance, approved previously in accordance with AD 98-20-20, amendment 39-10786, are approved as alternative methods of compliance with this AD.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(k) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(l) Except as provided by paragraphs (h) and (i)(2) of this AD, the actions shall be done in accordance with Boeing Service Bulletin 747-53-2275, dated March 26, 1987; Boeing Service Bulletin 747-53-2275, Revision 1, dated August 13, 1987; Boeing Service Bulletin 747-53-2275, Revision 2, dated March 31, 1988; Boeing Service Bulletin 747-53-2275, Revision 3, dated March 29, 1990; Boeing Service Bulletin 747-53-2275, Revision 4, dated March 26, 1992; Boeing Service Bulletin 747-53-2275, Revision 5, dated January 16, 1997; or Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998; as applicable. This incorporation by reference was approved previously by the Director of the Federal Register as of October 7, 1998 (63 FR 50495, September 22, 1998). Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(m) This amendment becomes effective on September 6, 2000.

FOR FURTHER INFORMATION CONTACT: Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; fax (425) 227-1181.

Issued in Renton, Washington, on July 26, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

ALLIEDSIGNAL INC.
AIRWORTHINESS DIRECTIVES
ENGINE
LARGE AIRCRAFT

2000-15-09 Honeywell International Inc.: Amendment 39-11841. Docket 99-NE-10-AD.

Applicability

Honeywell International Inc. (formerly AlliedSignal Inc. and Garrett Turbine Engine Company) TFE731-2, -3, -4, and -5 series turbofan engines with high pressure compressor (HPC) impeller part numbers (P/Ns) 3073393-1, 3073394-1, 3073433-1, 3073434-1, 3073398-All (All denotes all dash numbers), 3073435-All, and 3075171-All, installed on, but not limited to, Avions Marcel Dassault-Breguet Aviation (AMD/BA) Falcon 10, Dassault-Aviation Mystere-Falcon 50, and 900 series airplanes; Dassault Aviation Mystere-Falcon 20 series airplanes; Learjet Inc. Models 31, 35, 36, and 55 series airplanes; Lockheed-Georgia Corporation 1329-23 and -25 series airplanes; Israel Aircraft Industries Ltd. 1124 series and 1125 Westwind series airplanes; Cessna Aircraft Co. Model 650 Citation III, VI, and VII series airplanes; Raytheon Aircraft Co. HS-125 series airplanes; and Sabreliner Corporation NA-265-65 airplanes.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Required as indicated, unless accomplished previously.

To prevent failure of the HPC impeller due to fatigue cracking, accomplish the following:

Initial Inspection

(a) Remove and inspect the applicable HPC impeller in accordance with Section 2.A. of the Accomplishment Instructions of AlliedSignal Inc. Alert Service Bulletin (ASB) TFE731-A72-3641, Revision 1, dated October 20, 1999, or ASB TFE731-A72-3641 dated November 24, 1998, and, if necessary, replace the impeller with a serviceable impeller at the earlier of the following:

(1) At the next core zone inspection (CZI) after the effective date of this AD; or

(2) At the next access to the HPC module after the effective date of this AD.

Repetitive Inspection

(b) Thereafter, remove and inspect the applicable HPC impeller in accordance with Section 2.A. of the Accomplishment Instructions of ASB TFE731-A72-3641, dated November 24, 1998, or ASB TFE731-A72-3641, Revision 1, dated October 20, 1999, and, if necessary, replace the impeller with a serviceable impeller, whenever either of the following conditions are met:

(1) At every CZI; or

(2) At access to the HPC module if the impeller has accumulated more than 1,000 cycles since the last Eddy Current Inspection (ECI).

Definitions

(c) This AD defines access to the HPC module as whenever the low pressure compressor case is removed from the compressor interstage diffuser.

(d) For the purposes of this AD, a serviceable impeller is defined as an impeller that complies with all applicable visual, dimensional, and fluorescent penetrant inspections requirements for the level of maintenance being accomplished, as contained in the Heavy Maintenance Manual, and is either an impeller with fewer than 1000 engine operation cycles since new or an impeller with fewer than 1000 engine operation cycles since last ECI.

Alternative Method of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (LAACO). Operators shall submit their request through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, LAACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the LAACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with §§21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

Documents Incorporated by Reference

(g) The actions required by this AD shall be done in accordance with the following AlliedSignal Inc. Alert Service Bulletins:

Document No.	Pages	Revision	Date
TFE731-A72-3641	10	Original	November 24, 1998
Total pages: 10			
TFE731-A72-3641	12	1	October 20, 1999
Total pages: 12			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Honeywell Engines and Systems (formerly AlliedSignal) Technical Publications and Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170; telephone: (602) 365-2493 (General Aviation), (602) 365-5535 (Commercial), fax: (602) 365-5577 (General Aviation), (602) 365-2832 (Commercial). Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on October 10, 2000.

FOR FURTHER INFORMATION CONTACT: Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; telephone: (562) 627-5246, fax: (562) 627-5210.

Issued in Burlington, Massachusetts, on July 10, 1999.
David A. Downey Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service

BW 2000-16

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-11 MCDONNELL DOUGLAS: Amendment 39-11843. Docket 2000-NM-100-AD.

Applicability: Model DC-8 series airplanes that have been converted from a passenger to a cargo-carrying ("freighter") configuration in accordance with Supplemental Type Certificate (STC) SA1862SO; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent opening of the cargo door while the airplane is in flight, and consequent rapid decompression of the airplane including possible loss of flight control or severe structural damage, accomplish the following:

Actions Addressing the Main Deck Cargo Door

(a) Within 60 days after the effective date of this AD, accomplish a general visual inspection of the wire bundle of the main deck cargo door between the exit point of the cargo liner and the attachment point on the main deck cargo door to detect crimped, frayed, or chafed wires; and perform a general visual inspection for damaged, loose, or missing hardware mounting components. If any crimped, frayed, or chafed wire, or damaged, loose, or missing hardware mounting component is detected, prior to further flight, repair in accordance with FAA-approved maintenance procedures.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(b) Within 60 days after the effective date of this AD, revise the Limitations Section of the appropriate FAA-approved Airplane Flight Manual Supplement (AFMS) for STC SA1862SO by inserting therein procedures to ensure that the main deck cargo door is fully closed, latched, and locked prior to dispatch of the airplane, and install any associated placards. The AFMS revision procedures and installation of any associated placards shall be accomplished in accordance with a method approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate.

Actions Addressing the Main Deck Cargo Door Systems

(c) Within 18 months after the effective date of this AD, accomplish the actions specified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD in accordance with a method approved by the Manager, Los Angeles ACO.

(1) Modify the indication system of the main deck cargo door to indicate to the pilots whether the main deck cargo door is fully closed, latched, and locked;

(2) Modify the mechanical and hydraulic systems of the main deck cargo door to eliminate detrimental deformation of elements of the door latching and locking mechanism;

(3) Install a means to visually inspect the locking mechanism of the main deck cargo door;

(4) Install a means to remove power to the door while the airplane is in flight; and

(5) Install a means to prevent pressurization to an unsafe level if the main deck cargo door is not fully closed, latched, and locked.

NOTE 3: Installation of National Aircraft Service Inc. (NASI) Vent Door System STC ST01245CH, is an approved means of compliance with the requirements of paragraph (c) of this AD.

(d) Compliance with paragraphs (c)(1), (c)(2), (c)(3), (c)(4), and (c)(5) of this AD constitutes terminating action for the requirements of paragraphs (a) and (b) of this AD, and the AFMS revision and placards may be removed.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permit

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Effective Date

(g) This amendment becomes effective on September 7, 2000.

FOR FURTHER INFORMATION CONTACT: Michael E. O'Neil, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5320; fax (562) 627-5210.

Issued in Renton, Washington, on July 28, 2000.
Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

APPENDIX 1

Excerpt from an FAA Memorandum to Director-Airworthiness and Technical Standards of ATA, dated March 20, 1992

"(1) **Indication System**:

(a) The indication system must monitor the closed, latched, and locked positions, directly.

(b) The indicator should be **amber** unless it concerns an outward opening door whose opening during takeoff could present an immediate hazard to the airplane. In that case the indicator must be **red** and located in plain view in front of the pilots. An aural warning is also advisable. A display on the master caution/warning system is also acceptable as an indicator. For the purpose of complying with this paragraph, an immediate hazard is defined as significant reduction in controllability, structural damage, or impact with other structures, engines, or controls.

(c) Loss of indication or a false indication of a closed, latched, and locked condition must be improbable.

(d) A warning indication must be provided at the door operators station that monitors the door latched and locked conditions directly, unless the operator has a visual indication that the door is fully closed and locked. For example, a vent door that monitors the door locks and can be seen from the operators station would meet this requirement.

(2) **Means to Visually Inspect the Locking Mechanism**:

There must be a visual means of directly inspecting the locks. Where all locks are tied to a common lock shaft, a means of inspecting the locks at each end may be sufficient to meet this requirement provided no failure condition in the lock shaft would go undetected when viewing the end locks. Viewing latches may be used as an alternate to viewing locks on some installations where there are other compensating features.

(3) **Means to Prevent Pressurization**:

All doors must have provisions to prevent initiation of pressurization of the airplane to an unsafe level, if the door is not fully closed, latched and locked.

(4) **Lock Strength**:

Locks must be designed to withstand the maximum output power of the actuators and maximum expected manual operating forces treated as a limit load. Under these conditions, the door must remain closed, latched and locked.

(5) **Power Availability**:

All power to the door must be removed in flight and it must not be possible for the flight crew to restore power to the door while in flight.

(6) **Powered Lock Systems**:

For doors that have powered lock systems, it must be shown by safety analysis that inadvertent opening of the door after it is fully closed, latched and locked, is extremely improbable."

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-12 BOEING: Amendment 39-11844. Docket 2000-NM-183-AD.

Applicability: Model 737-100, -200, and –200C series airplanes; line numbers 1 through 315 inclusive, 323, and 324; certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct stress corrosion cracking in the front spar of the center section of the horizontal stabilizer, which could result in structural failure of the horizontal stabilizer and loss of control of the airplane, accomplish the following:

Repetitive Detailed Visual Inspections

(a) Within 90 days after the effective date of this AD, perform a detailed visual inspection to detect cracks in the front spar of the center section of the horizontal stabilizer, in accordance with Boeing Alert Service Bulletin 737-55A1071, dated February 24, 2000. Thereafter, repeat the inspection twice more at intervals not to exceed 200 days, and thereafter at intervals not to exceed 24 months or 4,000 flight cycles, whichever occurs first.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

Rework

(b) Except as required by paragraph (c) of this AD, if any crack is detected during any inspection required by paragraph (a) of this AD, prior to further flight, accomplish rework of the front spar of the center section of the horizontal stabilizer (including removing damaged material, accomplishing a high frequency eddy current inspection to detect cracking, and shot peening the damaged area), in accordance with Boeing Alert Service Bulletin 737-55A1071, dated February 24, 2000.

Cracking Outside the Limits Specified in the Alert Service Bulletin

(c) If any crack that is outside the limits specified in the alert service bulletin is detected during any inspection required by paragraph (a) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate; or in accordance with data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the approval letter must specifically reference this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (c) of this AD, the actions shall be done in accordance with Boeing Alert Service Bulletin 737-55A1071, dated February 24, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2557; fax (425) 227-1181.

Issued in Renton, Washington, on July 28, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-13 MCDONNELL DOUGLAS: Amendment 39-11845. Docket 2000-NM-218-AD. Supersedes AD 99-09-04, Amendment 39-11136.

Applicability: Model MD-11 series airplanes, manufacturer's fuselage numbers 0447 through 0464 inclusive, 0466 through 0475 inclusive; 0476 through 0489 inclusive; and 0491 through 0509 inclusive; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent smoke and possible fire in the overhead switch panel lighting circuitry due to an overload condition, as a result of lack of circuit breaker protection, accomplish the following:

One-Time Inspection

(a) For airplanes having manufacturer's fuselage numbers 0447 through 0464 inclusive, and 0466 through 0475 inclusive: Within 60 days after May 7, 1999 (the effective date AD 99-09-04), perform a one-time inspection to verify correct wire terminations of certain circuit breakers in the cockpit overhead switch panel, in accordance with McDonnell Douglas Alert Service Bulletin MD11-33A027, dated March 10, 1999; Revision 01, dated June 2, 1999; or Revision 02, dated June 12, 2000. As of the effective date of this AD, only Revision 02 of the service bulletin shall be used.

(b) For airplanes having manufacturer's fuselage numbers 0476 through 0489 inclusive, and 0491 through 0509 inclusive: Within 60 days after the effective date of this AD, perform a one-time inspection to verify correct wire terminations of certain circuit breakers in the cockpit overhead switch panel, in accordance with McDonnell Douglas Alert Service Bulletin MD11-33A027, Revision 02, dated June 12, 2000.

NOTE 2: Inspection of certain circuit breakers in the cockpit overhead switch panel prior to the effective date of this AD in accordance with McDonnell Douglas Alert Service Bulletin MD11-33A027, dated March 10, 1999, or Revision 01, dated June 2, 1999; is considered acceptable for compliance with the requirements of paragraph (b) of this AD.

Condition 1 (Correct Wire Terminations)

(c) If, during the inspection required by either paragraph (a) or (b) of this AD, all affected circuit breakers are found to have correct wire terminations, no further action is required by this AD.

Condition 2 (Incorrect Wire Terminations)

(d) If, during the inspection required by either paragraph (a) or (b) of this AD, any affected circuit breaker is found to have an incorrect wire termination, prior to further flight, correct termination in accordance with McDonnell Douglas Alert Service Bulletin MD11-33A027, Revision 02, dated June 12, 2000.

NOTE 3: Correction of incorrect wire termination prior to the effective date of this AD in accordance with McDonnell Douglas Alert Service Bulletin MD11-33A027, dated March 10, 1999, or Revision 01, dated June 2, 1999; is considered acceptable for compliance with the requirements of paragraph (d) of this AD.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) The actions shall be done in accordance with McDonnell Douglas Alert Service Bulletin MD11-33A027, dated March 10, 1999; McDonnell Douglas Alert Service Bulletin MD11-33A027, Revision 01, dated June 2, 1999; or McDonnell Douglas Alert Service Bulletin MD11-33A027, Revision 02, dated June 12, 2000; as applicable.

(1) The incorporation by reference of McDonnell Douglas Alert Service Bulletin MD11-33A027, Revision 01, dated June 2, 1999, and McDonnell Douglas Alert Service Bulletin MD11-33A027, Revision 02, dated June 12, 2000, is approved by the Director of the Federal Register in accordance with 5 U.S.C 552(a) and 1 CFR part 51.

(2) The incorporation by reference of McDonnell Douglas Alert Service Bulletin MD11-33A027, dated March 10, 1999, was approved previously by the Director of the Federal Register as of May 7, 1999 (64 FR 19695, April 22, 1999).

(3) Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on July 28, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-14 MCDONNELL DOUGLAS: Amendment 39-11846. Docket 2000-NM-219-AD.

Applicability: Model MD-11 series airplanes, as listed in Boeing Alert Service Bulletin MD11-24A181, dated June 27, 2000; certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent propagation of smoke and fumes in the cockpit and passenger cabin due to an inoperable remote control circuit breaker (RCCB) of the alternating current (AC) cabin bus switch during smoke and fume isolation procedures, accomplish the following:

Inspection

(a) Within 45 days after the effective date of this AD, perform an inspection to verify operation of the RCCB's of the AC cabin bus switch in accordance with Boeing Alert Service Bulletin MD11-24A181, dated June 27, 2000.

Condition 1 (Proper Operation): Repetitive Inspections

(1) If all RCCB's are operating properly, repeat the inspection thereafter at intervals not to exceed 700 flight hours.

Condition 2 (Improper Operation): Replacement and Repetitive Inspections

(2) If any RCCB is NOT operating properly, prior to further flight, replace the failed RCCB with a new RCCB in accordance with the service bulletin. Repeat the inspection thereafter at intervals not to exceed 700 flight hours.

Alternative Methods of Compliance

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(d) The actions shall be done in accordance with Boeing Alert Service Bulletin MD11-24A181, dated June 27, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60).

Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Brett Portwood, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5350; fax (562) 627-5210.

Issued in Renton, Washington, on July 28, 2000.
John J. Hickey, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-15 MCDONNELL DOUGLAS: Amendment 39-11847. Docket 2000-NM-89-AD. Supersedes AD 2000-03-51, Amendment 39-11595.

Applicability: All Model DC-9, Model MD-90-30, Model 717-200, and Model MD-88 airplanes, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

NOTE 2: Inspections and follow-on and corrective actions accomplished prior to the effective date of this AD in accordance with Revision 1 of Boeing Alert Service Bulletin MD90-27A034, Revision 01, DC9-27A362, Revision 01, and 717-27A0002, Revision 01; all dated February 12, 2000; are considered acceptable for compliance with the applicable actions required by this AD that are specified in the original issue of the applicable alert service bulletin.

To prevent loss of pitch trim capability due to excessive wear of the jackscrew assembly of the horizontal stabilizer, which could result in reduced controllability of the airplane, accomplish the following:

Inspections, Check, and Test (Phase 1)

(a) Prior to the accumulation of 650 hours total time-in-service (TTIS), or within 72 hours after March 6, 2000 (the effective date of AD 2000-03-51, amendment 39-11595), whichever occurs later, accomplish the actions required by paragraphs (a)(1), (a)(2), (a)(3), (a)(4), and (a)(5) of this AD; in accordance with Phase 1 of the Accomplishment Instructions of Boeing Alert Service Bulletin DC9-27A362, dated February 11, 2000 (original issue), or Revision 02, dated March 30, 2000 (for Model DC-9 and Model MD-88 airplanes); MD90-27A034, dated February 11, 2000 (original issue), or Revision 02, dated March 30, 2000 (for Model MD-90-30 airplanes); or 717-27A0002, dated February 11, 2000 (original issue), or Revision 02, dated March 30, 2000 (for Model 717-200 airplanes); as applicable. Repeat the actions required by paragraph (a) of this AD thereafter at intervals not to exceed 650 flight hours. As of the effective date of this AD, the repetitive inspections required by this paragraph must be accomplished as detailed visual inspections in accordance with Phase 1 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin.

(1) Perform a general visual inspection of the lubricating grease on the jackscrew assembly and the area directly below the jackscrew and surrounding areas for the presence of metallic particles (including slivers, dust, shavings, and flakes) in accordance with Phase 1 of the Accomplishment Instructions of either the original issue or Revision 02 of the applicable alert service bulletin. If the presence of metallic particles is detected, prior to further flight, remove and replace the jackscrew assembly with a new or serviceable assembly; or accomplish the detailed visual inspections, follow-on actions, and corrective actions, as applicable; in accordance with Phase 1 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin.

(2) Perform a general visual inspection of the jackscrew assembly to detect the presence of corrosion, pitting, or distress in accordance with Phase 1 of the Accomplishment Instructions of either the original issue or Revision 02 of the applicable alert service bulletin.

If any corrosion, pitting, or distress is detected, prior to further flight, remove and replace the jackscrew assembly with a new or serviceable assembly; or accomplish the detailed visual inspections, follow-on actions, and corrective actions, as applicable; in accordance with Phase 1 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin.

(3) During any inspection conducted prior to the effective date of this AD, check the condition of the jackscrew assembly lubricant in accordance with Phase 1 of the Accomplishment Instructions of the original issue of the applicable alert service bulletin. If the jackscrew assembly is dry, prior to further flight, lubricate the assembly in accordance with Phase 1 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin.

NOTE 3: During other inspections required by this AD, lubrication of the jackscrew is checked in accordance with Phase 1 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin.

(4) Inspect the horizontal stabilizer jackscrew upper and lower mechanical stops for general condition in accordance with the Phase 1 of the Accomplishment Instructions of either the original issue or Revision 02 of the applicable alert service bulletin; and record the condition.

(5) Perform a test of the horizontal stabilizer shutoff controls in accordance with Phase 1 of the Accomplishment Instructions of either the original issue or Revision 02 of the applicable alert service bulletin. If the mechanical stop on the jackscrew contacts the mechanical stop on the acme nut prior to limit switch shutoff, prior to further flight, adjust the horizontal stabilizer trim system in accordance with operator-approved maintenance instructions.

NOTE 4: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

NOTE 5: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc. may be used. Surface cleaning and elaborate access procedures may be required."

NOTE 6: Accomplishment of steps (b) through (e) of BOECOM message number M-7200-00-00456, dated February 9, 2000, constitutes compliance with paragraphs (a)(2), (a)(3), (a)(4), and (a)(5) of this AD.

Wear Checks (Phase 2)

(b) Within 2,000 flight hours since the last endplay check of the jackscrew and acme nut conducted in accordance with the McDonnell Douglas DC-9 Maintenance Manual, Chapter 27-40-1; McDonnell Douglas MD-80 Maintenance Manual, Chapter 27-40-01; McDonnell Douglas MD-90 Maintenance Manual, Chapter 27-41-10; or Boeing 717 Maintenance Manual, Chapter 27-41-04; or within 30 days after March 6, 2000, whichever occurs later: Perform endplay and freeplay checks of the jackscrew and acme nut in accordance with Phase 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin DC9-27A362, dated February 11, 2000, or Revision 02, dated March 30, 2000 (for Model DC-9 and Model MD-88 airplanes); MD90-27A034, dated February 11, 2000, or Revision 02, dated March 30, 2000 (for Model MD-90-30 airplanes); or 717-27A0002, dated February 11, 2000, or Revision 02, dated March 30, 2000 (for Model 717-200 airplanes); as applicable. Repeat the endplay and freeplay checks thereafter at intervals not to exceed 2,000 flight hours. As of the effective date of this AD, only Phase 2 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin shall be used to accomplish the requirements of this paragraph (including the corrective actions specified in Phase 2 of the Accomplishment Instructions of Revision 02 of the applicable alert service bulletin).

NOTE 7: Accomplishment of step (a) of BOECOM message number M-7200-00-00456, dated February 9, 2000, constitutes compliance with paragraph (b) of this AD.

Reporting Requirement

(c) At intervals not to exceed 90 days after accomplishing the endplay checks required by paragraphs (a) and (b) of this AD, submit a report of the results of the endplay checks to The Boeing Company, Long Beach Division, P.O. Box 1771, Long Beach, California 90801, Attention: Senior Manager - Systems, Technical and Fleet Support, Service Engineering D035-0035; fax: (562) 497-5811. Results of the endplay checks may be accumulated and submitted at the intervals required by this paragraph.

Information collection requirements contained in this regulation have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) and have been assigned OMB Control Number 2120-0056.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE 8: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Manager, Los Angeles ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) Except as provided by paragraph (a)(5) of this AD for adjusting the horizontal stabilizer trim system, the actions shall be done in accordance with Boeing Alert Service Bulletin DC9-27A362, dated February 11, 2000; Boeing Alert Service Bulletin DC9-27A362, Revision 02, dated March 30, 2000; Boeing Alert Service Bulletin MD90-27A034, dated February 11, 2000; Boeing Alert Service Bulletin MD90-27A034, Revision 02, dated March 30, 2000; Boeing Alert Service Bulletin 717-27A0002, dated February 11, 2000; or Boeing Alert Service Bulletin 717-27A0002, Revision 02, dated March 30, 2000.

(1) The incorporation by reference of Boeing Alert Service Bulletin DC9-27A362, Revision 02, dated March 30, 2000; Boeing Alert Service Bulletin MD90-27A034, Revision 02, dated March 30, 2000; and Boeing Alert Service Bulletin 717-27A0002, Revision 02, dated March 30, 2000; is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Alert Service Bulletin DC9-27A362, dated February 11, 2000; Boeing Alert Service Bulletin MD90-27A034, dated February 11, 2000; and Boeing Alert Service Bulletin 717-27A0002, dated February 11, 2000; was approved previously by the Director of the Federal Register as of March 6, 2000 (65 FR 10379, February 28, 2000).

(3) Copies may be obtained from The Boeing Company, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L52 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on August 23, 2000.

FOR FURTHER INFORMATION CONTACT: Mike Lee, Aerospace Engineer, Structures Branch, ANM-120L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5325; fax (562) 627-5210.

Issued in Renton, Washington, on July 28, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-16 BOEING: Amendment 39-11848. Docket 98-NM-355-AD.

Applicability: Model 737 series airplanes, line numbers 1 through 2984 inclusive; Model 757 series airplanes, line numbers 1 through 798 inclusive; Model 767 series airplanes, line numbers 1 through 682 inclusive; and Model 777 series airplanes, line numbers 1 through 083 inclusive; certificated in any category; and equipped with Puritan-Bennett passenger and flight attendant oxygen masks, as listed in Boeing Service Bulletin 737-35-1049, dated September 17, 1998; 757-35-0014, dated September 10, 1998; 767-35-0033, dated September 10, 1998; or 777-35-0005, dated September 3, 1998; as applicable.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of the supplemental oxygen system to deliver oxygen to the passengers and flight attendants in the event of decompression, which could result in injury to passengers and flight attendants, accomplish the following:

Inspection

(a) Within 5 years after the effective date of this AD, perform a general visual inspection to determine the vendor of all oxygen masks in the passenger cabin in accordance with Boeing Service Bulletin 737-35-1049, including Appendix A, dated September 17, 1998 (for Model 737 series airplanes); Boeing Service Bulletin 757-35-0014, including Appendix A, dated September 10, 1998 (for Model 757 series airplanes); Boeing Service Bulletin 767-35-0033, including Appendix A, dated September 10, 1998 (for Model 767 series airplanes); or Boeing Service Bulletin 777-35-0005, including Appendix A, dated September 3, 1998, (for Model 777 series airplanes); as applicable.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(1) If the oxygen mask is not manufactured by Puritan-Bennett, no further action is required by this AD for that mask.

(2) If the oxygen mask is manufactured by Puritan-Bennett, OR if the manufacturer of the mask cannot be identified, prior to further flight, perform a general visual inspection to determine the manufacturing date of the oxygen mask, in accordance with the applicable service bulletin.

Corrective Action

(b) For each oxygen mask manufactured by Puritan-Bennett or an unidentified manufacturer, if the mask was manufactured between May 1986 and July 1998 inclusive, OR if the manufacturing date cannot be determined: Prior to further flight, accomplish either paragraph (b)(1) or (b)(2) of this AD.

(1) Replace the lanyards on the masks with new lanyards in accordance with Boeing Service Bulletin 737-35-1049, including Appendix A, dated September 17, 1998 (for Model 737 series airplanes); 757-35-0014, including Appendix A, dated September 10, 1998 (for Model 757 series airplanes); 767-35-0033, including Appendix A, dated September 10, 1998 (for Model 767 series airplanes); or 777-35-0005, including Appendix A, dated September 3, 1998 (for Model 777 series airplanes); as applicable.

(2) Replace the existing oxygen mask with a new mask that was manufactured by Puritan-Bennett before May 1986 or after July 1998, or by another vendor, and that has the same Boeing part number, or that is FAA-approved for installation as an alternative to the Puritan-Bennett mask.

Spares

(c) As of the effective date of this AD, no person shall install an oxygen mask manufactured by Puritan-Bennett between May 1986 and July 1998 inclusive, on any airplane, unless the lanyard has been replaced with a new lanyard in accordance with paragraph (b) of this AD.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with Boeing Service Bulletin 737-35-1049, including Appendix A, dated September 17, 1998 (for Model 737 series airplanes); Boeing Service Bulletin 757-35-0014, including Appendix A, dated September 10, 1998 (for Model 757 series airplanes); Boeing Service Bulletin 767-35-0033, including Appendix A, dated September 10, 1998 (for Model 767 series airplanes); or Boeing Service Bulletin 777-35-0005, including Appendix A, dated September 3, 1998 (for Model 777 series airplanes); as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on September 12, 2000.

FOR FURTHER INFORMATION CONTACT: Susan J. Letcher, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2670; fax (425) 227-1181.

Issued in Renton, Washington, on July 31, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

MCDONNELL DOUGLAS AIRWORTHINESS DIRECTIVES LARGE AIRCRAFT

2000-15-17 MCDONNELL DOUGLAS: Amendment 39-11849. Docket 99-NM-227-AD.

Applicability: Models and series of airplanes as listed in the applicable McDonnell Douglas service bulletin(s) specified in Table 1 of this AD, certificated in any category.

TABLE 1

Model of Airplane	McDonnell Douglas Service Bulletin(s)
DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) series airplanes.	MD80-29-056, dated June 18, 1996; MD80-29-062, Revision 01, dated August 3, 1999; and MD80-53-286, dated September 3, 1999.
MD-88 airplanes	MD80-29-062, Revision 01, dated August 3, 1999; and MD80-53-286, dated September 3, 1999.
MD-90-30 series airplanes	MD90-53-018, dated September 3, 1999.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent hydraulic fluid leakage into the auxiliary power unit (APU) inlet due to fatigue vibration and cracking in the flared radius of a hydraulic pipe in the aft fuselage, which could result in smoke and odors in the passenger cabin or cockpit; accomplish the following:

Installation of a Pipe Support and Clamps

(a) For Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) series airplanes, as listed in McDonnell Douglas Service Bulletin MD80-29-056, dated June 18, 1996: Within 18 months after the effective date of this AD, install a pipe support and clamps on the hydraulic lines in the aft fuselage in accordance with the service bulletin.

Replacement of the Hydraulic Pipe Assembly

(b) For Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) series airplanes, and Model MD-88 airplanes, as listed McDonnell Douglas Service Bulletin MD80-29-062, Revision 01, dated August 3, 1999: Within 18 months after the effective date of this AD, replace the hydraulic pipe assembly in the aft fuselage with a new pipe assembly having a greater wall thickness, in accordance with the service bulletin. Except for Model MD-88 airplanes that have been modified in accordance with McDonnell Douglas MD-80 Service Bulletin 29-54, dated February 2, 1993, or Revision 2, dated December 17, 1993, the requirements of this paragraph must be accomplished concurrently with the requirements of paragraph (a) of this AD.

Installation of Drain Tube Assemblies and Diverter Assemblies

(c) For Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) series airplanes, as listed in McDonnell Douglas Service Bulletin MD80-53-286, dated September 3, 1999; and Model MD-90-30 series airplanes, as listed in McDonnell Douglas Service Bulletin MD90-53-018, dated September 3, 1999: Within 36 months after the effective date of this AD, install drain tube assemblies and diverter assemblies in the area of the APU inlet, in accordance with the applicable service bulletin.

Spares

(d) As of the effective date of this AD, no person shall install a hydraulic pipe assembly, part number 7936907-603, on any airplane.

Alternative Methods of Compliance

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

Special Flight Permits

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(g) The actions shall be done in accordance with McDonnell Douglas Service Bulletin MD80-29-056, dated June 18, 1996; McDonnell Douglas Service Bulletin MD80-29-062, Revision 01, dated August 3, 1999; McDonnell Douglas Service Bulletin MD80-53-286, dated September 3, 1999; or McDonnell Douglas Service Bulletin MD90-53-018, dated September 3, 1999; as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Technical Publications Business Administration, Dept. C1-L51 (2-60). Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(h) This amendment becomes effective on September 12, 2000.

FOR FURTHER INFORMATION CONTACT: Albert Lam, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Transport Airplane Directorate, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5346; fax (562) 627-5210.

Issued in Renton, Washington, on July 31, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

BOEING
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT

2000-15-18 BOEING: Amendment 39-11851. Docket 99-NM-320-AD. Supersedes AD 96-17-04, Amendment 39-9712.

Applicability: Model 737-100 and -200 series airplanes, line numbers 001 through 813 inclusive, certificated in any category.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent possible failure of one or more hydraulic systems and consequent reduced controllability of the airplane, accomplish the following:

RESTATEMENT OF REQUIREMENTS OF AD 96-17-04:

Repetitive Inspections

(a) Within one year after September 17, 1996 (the effective date of AD 96-17-04, amendment 39-9712), perform an eddy current inspection to detect cracking of the support fitting of the Krueger flap actuator on each wing, in accordance with Boeing Service Bulletin 737-57-1129, Revision 1, dated October 30, 1981; as revised by Notices of Status Change 737-57-1129 NSC 1, dated July 23, 1982; 737-57-1129 NSC 2, dated April 14, 1983; and 737-57-1129 NSC 3, dated May 18, 1995; or Revision 2, dated May 28, 1998.

(1) If no cracking is detected, repeat the inspection required by paragraph (a) of this AD thereafter at intervals not to exceed 3,000 hours time-in-service.

(2) If any cracking is detected, prior to further flight, accomplish the replacement and modification specified in paragraph (b) of this AD.

NEW REQUIREMENTS OF THIS AD:

Terminating Action

(b) Within 5 years after the effective date of this AD: Replace any existing aluminum support fitting of the Krueger flap actuator on each wing with a steel fitting, and modify the actuator aft attachment, in accordance with Boeing Service Bulletin 737-57-1129, Revision 2, dated May 28, 1998. Accomplishment of this replacement and modification constitutes terminating action for the repetitive inspections required by paragraph (a) of this AD.

NOTE 2: Replacement of the existing aluminum support fitting of the Krueger flap actuator on each wing with a steel fitting, and modification of the actuator aft attachment, prior to the effective date of this AD, in accordance with Boeing Service Bulletin 737-57-1129, Revision 1, dated October 30, 1981; as revised by Notices of Status Change 737-57-1129 NSC 1, dated July 23, 1982; 737-57-1129 NSC 2, dated April 14, 1983; and 737-57-1129 NSC 3, dated May 18, 1995; is considered acceptable for compliance with the modification required by paragraph (b) of this AD.

Spares

(c) As of the effective date of this AD, no person shall install on any airplane any aluminum support fitting identified in the "Existing Part Number" column of Paragraph 2.D. of Boeing Service Bulletin 737-57-1129, Revision 2, dated May 28, 1998.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The actions shall be done in accordance with Boeing Service Bulletin 737-57-1129, Revision 1, dated October 30, 1981; as revised by Notice of Status Change 737-57-1129 NSC 1, dated July 23, 1982; Notice of Status Change 737-57-1129 NSC 2, dated April 14, 1983; and Notice of Status Change 737-57-1129 NSC 3, dated May 18, 1995; or Boeing Service Bulletin 737-57-1129, Revision 2, dated May 28, 1998; as applicable.

(1) The incorporation by reference of Boeing Service Bulletin 737-57-1129, Revision 2, dated May 28, 1998, is approved by the Director of the Federal Register, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The incorporation by reference of Boeing Service Bulletin 737-57-1129, Revision 1, dated October 30, 1981; as revised by Notice of Status Change 737-57-1129 NSC 1, dated July 23, 1982; Notice of Status Change 737-57-1129 NSC 2, dated April 14, 1983; and Notice of Status Change 737-57-1129 NSC 3, dated May 18, 1995; was approved previously by the Director of the Federal Register as of September 17, 1996 (61 FR 41957, August 13, 1996).

(3) Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(g) This amendment becomes effective on September 12, 2000.

FOR FURTHER INFORMATION CONTACT: Nancy Marsh, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2028; fax (425) 227-1181.

Issued in Renton, Washington, on July 31, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

BW 2000-16

CESSNA AIRCRAFT COMPANY
AIRWORTHINESS DIRECTIVES
FINAL RULE OF EMERGENCY
LARGE AIRCRAFT

2000-15-51 CESSNA AIRCRAFT COMPANY: Amendment 39-11850. Docket 2000-NM-255-AD.

Applicability: Model 560XL airplanes, certificated in any category; serial numbers (S/N) -5002 and subsequent.

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent interference between the aileron cable fairlead tube and the aileron cable sector, which could result in loss of control of the airplane, accomplish the following:

Pre-modification Inspection

(a) For airplanes having S/N -5002 through -5093 inclusive: Before the next flight after the effective date of this AD, perform a general visual inspection to measure how far the aileron fairlead tube protrudes beyond the clamp at the aft aileron sector. This area of the airplane is depicted in Figure 1 of Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. Thereafter, repeat the inspection at intervals not to exceed 5 flight cycles until accomplishment of paragraph (b) of this AD. If, during any inspection required by this paragraph, more than one-half inch of the tube is found to protrude, prior to further flight, accomplish the actions specified by paragraph (b) of this AD.

NOTE 2: For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

Modification

(b) For airplanes having S/N -5002 through -5093 inclusive: Within 25 flight hours or 30 days after the effective date of this AD, whichever occurs first, modify the aileron fairlead tubes (including trimming the fairlead tube and cementing the clamp to the tube with fuel tank sealer) in accordance with Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. Allow 2 hours of cure time before further flight. Accomplishment of the modification terminates the repetitive inspection requirement of paragraph (a) of this AD.

Post-modification Inspection

(c) For all airplanes: At the applicable time specified by paragraph (c)(1) or (c)(2) of this AD, perform a general visual inspection to determine if the fairlead tube is flush with the clamp. This area of the airplane is depicted in Figure 1 of Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. If the tube is not flush, prior to further flight, repeat the actions specified by paragraph (b) of this AD, and notify the Manager, Wichita Aircraft Certification Office (ACO), FAA, Mid-Continent Airport, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone (316) 946-4106; fax (316) 946-4407. Repeat the inspection thereafter at intervals not to exceed 110 flight hours.

(1) For airplanes having S/N -5002 through -5093 inclusive: At the next scheduled maintenance or within 110 flight hours after the modification required by paragraph (b) of this AD, whichever occurs first.

(2) For S/N -5094 and subsequent: At the next scheduled maintenance or within 110 flight hours after the effective date of this AD, whichever occurs first.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Wichita ACO. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Wichita ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Wichita ACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(f) The modification shall be done in accordance with Cessna Service Bulletin SB560XL-27-10, including Service Bulletin Supplemental Data, dated July 13, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Cessna Aircraft Co., P.O. Box 7706, Wichita, Kansas 67277. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(g) This amendment becomes effective August 14, 2000, to all persons except those persons to whom it was made immediately effective by emergency AD 2000-15-51, issued on July 19, 2000, which contained the requirements of this amendment.

FOR FURTHER INFORMATION CONTACT: Shane Bertish, Aerospace Engineer, Systems and Propulsion Branch, ACE-116W, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4156; fax (316) 946-4407.

Issued in Renton, Washington, on July 31, 2000.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service